Old Japanese Plant Names

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Summary

This thesis deals with Old Japanese plant names, and looks into what Old Japanese plant names can tell us about the Old Japanese language. It also attempts to look at what etymological analyses of plant names can tell us about the folk taxonomy of Old Japanese.

In chapter 2 I briefly describe the Old Japanese language and its sources, and talk about changes that have taken place before Old Japanese, and also about the phonological variations within Old Japanese. I also note some of the research done on folk taxonomy and plant name semantics, especially in Scandinavian literature, and how this is relevant.

In chapter 3 I discuss the data more in detail, and look at how plant names are represented in the various texts, and what implications this has for our understanding of Old Japanese plant names.

In chapter 4 I deal with the data, and attempt to find a linguistically viable theory for all the plant names in Old Japanese as they are defined in this thesis, and also to find the motivation behind these etymologies. In this process mostly look at earlier theories, but attempt to solve the problems myself in cases where the earlier theories do not fit. Then I look at how the data from the etymological analysis can be used to describe Old Japanese plant names as a whole.

Foreword

Many people have been very kind and helpful to me during the writing of this thesis, and I would like to express my appreciation. First of all, I am thankful to my main supervisor Bjarke Frellesvig for his patient and strict guideance into the world of Old Japanese. Second, I would like to thank my second supervisor Tomoko Okazaki Hansen, whose constant encouragement and help has been extremely motivating.

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Last, I am happy to have such supporting collegues, and I thank you all for your patience and support throughout the process. Thanks also go to my friends and family.

Contents

1 Introduction

When I was younger, we had a large patch of *Lysimachia punctata* growing in our garden. The plant is tall and straight, the upper half covered in bright yellow flowers, and it became the subject of many garden talks. At that time however, we did not know its common name, and thus spontaneously named it *kumblomst* 'manhole flower'. The reason for this was that this large patch of yellow flowers was situated by two private manholes in our garden. From that day on, they were simply known by us as *kumblomst*.

Now, looking back, I think this story illustrates two points. That plant names can change abruptly when there is a need for it, and that a local name for a plant might be a reflection of the opinions of the people of that area. Of course, I am making no claim that all plant names are made in this spontaneous fashion, but it provided an interesting window into this world of naming in which we largely no longer take part. Plant names are usually taught to us by biological textbooks and naming organizations. For example, in Norway, Artsdatabanken ('The Species Database') appoints comittees to work with the correct naming of new and old species, following specific guidelines (Artsdatabanken).

1.1 Background

Working with plant names might seem strange, but looking at plant names can be useful in several aspects. First of all, it can tell us more about what people thought about the plant, or perhaps confirm historical data regarding people's opinions. Secondly, many plant names are based on their application, where they are found, when they bloom, or many other aspects of plant life and usage, and this can give us information about the spread and use of these plants. Plant names can also be useful for linguistic research.

1.2 Why Old Japanese

The Old Japanese language is the earliest attested stage of Japanese, and was spoken at a time when there were no national organizations in charge of biological nomenclature. The language is in many ways well described, but there are still many questions left to answer.

One striking thing about Old Japanese is the large amount of plant names found in the literature. Both in poems and prose it is possible to find large numbers of various plants.

In order to illustrate the importance of plant names in OJ, I would like to site a poem from the Man'yōshuu which includes several plant names. The poem itself is a list of seven autumn flowers:

	[These nana-kusa are:]
pagwi no pana	The lespedeza bicolor
*wo*bana kuzupana	the Miscanthus sinensis,
nadesikwo no pana	the Pueraria Thunbergiana;
womina*pyesi*	the Patrinia Scabiosaefolia,
mata pudipakama	the Dianthus superbus
asagapo no pana	with the Eupatorium sinensis and the Convolvulus major.

[MYS.8.1538] (Translation from Pierson (1954: 135)

As I mentioned, Old Japanese has generally been well described, but especially fields such as morphology, phonology and syntax interest linguists who work on Old Japanese. Semantic categories and the lexicon is not as well covered, and although there is some material available in Japanese; English language materials on Old Japanese plant names are scattered at best, and often treat plant names as a means to understand morphological or phonological processes.

The aim of this thesis is to look at the plants in Old Japanese (hereafter OJ) and look at the distribution throughout the corpus of Old Japanese texts. I will look at their etymology to some degree, and also at the motivation behind the naming of these plants. Furthermore, I will look at what these plants tell us about the folk taxonomy system of Old Japanese, the foreign influences on OJ plant names. I hope this paper can be one of several on

2 Earlier research and theory

Theory and methodology relevant to this thesis can largely be divided into four parts: research on Old Japanese, etymological research, research on the semantics behind plant names, and folk taxonomy research. These fields intertwine somewhat: understanding possible motivations might aid etymology, but etymology might also explain motivation. In addition, morphological analysis is difficult without the proper etymology, and in order to construct a taxonomic system, the morphological structure is important. In chapter 4 I will attemt to deal with these problems.

2.1 Terminology

First I would like to define the word *plant name*. I use it simply to refer to the words used to name plants, but it is important to remember that this thesis does not discuss all plant related words in OJ. Words for parts of plants, plant products and compounds with plants in them that do not refer to a separate species of plant are not discussed unless they are relevant in understanding the morphology or semantics of the various plant names. Although I use the term name, plant names are appellatives, or, common nouns, meaning they are different from *proper names*, which are used for people and places. Several authors I have encontered also discuss this question (Larsson 2013, Nyström 2013, Wetås 2013), noting that it is especially commonly used when refering to words denoting plants and animals, and I follow them, using *name*. Note that Wetås notes that although plant names are apellatives, they do also exhibit some characteristics often found in proper names, such as a *template* style creation pattern, where a fixed number of words are used to denote a specific characteristic, such as the word *blood* used to indicate the colour red. (Wetås 2013: 167)

This brings us to one tricky question: where should one draw the line between a compound that refers to a new plant, and one that simply refers to a plant in a specific place? One example is *hamana,* translated as ’greens that grow by the seaside’. We cannot be a hundred percent certain that this is not a the specific name of a type of marine plant, but in all these cases I have followed the Jidaibetsu kokugo daijiten: joudaihen (Omodaka 1967) (hereafter ZDB) if it does not define it as a separate *species* from the plant in the compound, or as a completely different species, but rather as a way of expression the location, then I will not discuss that word as a plant name. For *hamana,* that means that instead of viewing it, as we

theoretically could, as ’that one type of plant, similar to *na*, identified by its growing by the seaside’, along the lines of *amana*, and (perhaps) *karana*, we instead view it as ’members of the class *na* ‘greens’, that happen to grow by the seaside’.

I follow researchers like Larsson (Larsson 2013), and use the term *referent* to refer to the actual thing that a word refers to. In the case of the plant names, their referents are the plants in the real world, and can be identified by their Latin names, but in several cases, as will be discusses, finding the referent is difficult.

This thesis is a mainly descriptive one. I will attempt to describe the plant names of Old Japanese from three different angles, looking at what these different points of view might tell us about this fascinating group of words. Although plant etymology is nothing new, the field of plant name research is not well described, and I would like this thesis to be a step towards a better understanding of Japanese plant names.

2.2 Old Japanese Sources and Language

In this chapter I will discuss the various sources related to the Old Japanese language, and the sources from which this data comes from.

2.2.1 The Old Japanese Language and its sources

Old Japanese is the earliest attested variety of Japanese, mainly from the Nara period (712-794), but some texts from the Heian period are also believed to retain OJ features, and are therefore considered OJ texts.

2.3 The Japanese language

Japanese is head-final language, with a extensive verb morphology. Syntactic functions are marked with postposition, often referred to as particles. Almost all noun modification is before the noun, including relative sentences, nominal constructions and adjectives, while if a noun has affixes, they are almost always suffixes. Nominal inflection is almost nonexistant. In native Japanese vocabulary, suffixes are more common than prefixes, but there are some prefixes as well, such as o- ‘honorific prefix’. Nominal compounding is a common way of making new nouns, but deverbal nouns are not uncommon either.

2.4 Japanese Language periods

The Japanese language is divided into the following way, with the abbreviated name in paranthesis, followed by the years associated with each period.

Old Japanese (OJ)	700–800
Early Middle Japanese (EMD)	800–1200
Late Middle Japanese (LMJ)	1200 –1600
Modern Japanese (NJ)	1600–

(Frellesvig 2010: 1)

The Old Japanese Language is mainly linked to the Nara period (710-794 AD), while Early Middle Japanese is linked to the Heian period (794-1185 AD). Although Early Middle Japanese is not discussed in this thesis, the Heian period is sometimes mentioned when looking at later sources.

2.4.1 The structure of the Old Japanese language

OJ is in many ways similar to modern Japanese, and many words and grammatical elements have survived into modern Japanese. The differences are greater when it comes to pronunciation.[1] One of the most striking differences is in the verbal and adjectival morphology. However, nominal morphology, which is of more interest when looking at plant names, is relatively similar to modern Japanese. However, OJ also had some prefixes. Vovin mentions five: mi- 'honorific, ma- 'intensive', wo- and kwo- 'diminutive', and sa- 'locative'.(Vovin 2005, p. 65)

2.4.2 Vowels

One of the more striking differences when looking at research on OJ is the way it is romanized. Although phonologically OJ and NJ are very similar, they were phonetically quite different. When written in Japanese, some of these differences are not always noticeable, especially in material that does not deal much with the phonetics. The vowel system was more

[1] A history of the Japanese language (Frellesvig)

complicated, owing to a series of vowel combinations that took place before OJ, which have been reconstructed based on systematic differences in the usage of Chinese characters. (Frellesvig 2010: 26-31). These vowels are called 甲類 kō-rui or 乙類 otsu-rui. While in English they are sometimes marked with subscript numbers, with 1 for kō, and 2 for otsu. In the ZDB they are marked with vertical lines on either the right side (kō) or left side (otsu) of the kana in question. Notice however the special case of the kana え, for which a similar practice is used to separate e, called あ行のえ a-gyō no e 'e from the a-row'[2] from ye, called や行のえ ya gyō no (y)e '(y)e from the ya-row. E is written with a line on the left, and ye with a line on the right, opposite of the practice for the kō-otsu distinction.

I will use the system deviced by Frellesvig and Whitman (2008) to write these vowels, which prefers an approach where a glide is spelled out, reflecting the theory about the secondary nature of some of the vowels. If the phonologic status of a vowel is unknown it is called *neutral*, and I will make a note of this and the vowel will be kept unmarked. Here is a table showing different vowels.

Table 2: OJ vowels

Index value	**Frellesvig and Whitman**	**Example**
i1 (or neutral)	i	pi 'sun'
i2	wi	pwi 'fire'
e1	ye	mye 'woman'
e2 (or neutral)	e	me 'eye'
o1	wo	kwo 'child'
o2 (or neutral)	o	ko 'this'

2.4.3 Vowel deletion

One important process that took place in OJ is vowel deletion. OJ did not allow vowel sequences except from in a very limited number of words, and all vowel sequences were therefore shortened in compounds where one word ends in a vowel and the second word begins with one. If the first word in a compound is monosyllabic, the vowel in the second word is generally deleted, but in all other cases, the vowel in the first word is deleted, but there are also exceptions. One example is the commonly encountered word wagimo, which

[2] This is based on the modern Japanese kana structure in which consonantal variation is indicated in rows, while vowel variation is per column.

comes from *wa ga imo*, 'I GEN sister; beloved', where the *a* in *ga* has been deleted. (Frellesvig 2010, p. 39)

2.4.4 Consonants

Although the consonant system has been kept fairly stable through the history of the Japanese language, there are several changes and constraints that play an important part in the structure of various plant names. I will not cover the theories on the actual pronunciation of OJ in this chapter.[3] One constraint is that like in the other Altaic languages that Japanese sometimes is believed to be related to, Old Japanese nouns could not have /r-/ word initially. Word-medially it was allowed. The same applies to the mediae, a term for what in moder Japanese are voiced consonants. Almost all mediae in native Japanese words in OJ are believed to arise from a contraction with a nasal consonant, leading to prenasalization of the following consonant. This is why this term is used, and not the term 'voiced', hence the term mediae, not voiced consonants (Frellesvig 2010: 34). Although Frellesvig and Whitman keep the voiced consonants b d g z in writing, Vovin(2005) consequently writes OJ voiced consonants with a preceding capitalized N, where Frellesvig and Martin only uses this in discussions of Proto Japanese phonology. This is said to be the reason why there are so few words in modern Japanese of native Japanese origin that start with voiced consonants. Different from /r/, the voiced consonants can occur word initially, but are still believed to be a secondary development, and almost all these word-medial voiced consonants can safely be analyzed back to a nasal element. However, Frellesvig (2010: 41) mentions that this process might have been a part of morphophonemics of this stage of Japanese already, based on words where it is difficult to reconstruct a nasal element. Vovin notes that the genitive particle *no* and the dative-locative particle *ni* are commonly reduced in compounds (Vovin 2005: 50).

The simplication of the vowel system, vowel deletion, weakening of [p] to [f] and the disappearance of nasals with subsequent voicing are four large processes that make some words sound somewhat different than their modern equivalents.

[3] See for example Miyake (1999), or Frellesvig (2010)

2.4.5 Consonant alternations

Many OJ words also exhibit different forms of consonant alternations. In addition to various historical sound changes (onbin), there are also other variations. One very common such variation is m-b variation, of which examples survive into modern Japanese. Another type of variation seen in the data collected for this thesis is m-n variation as in OJ *mira*, NJ *nira*, but this is not common.

M-b variation is quite common, but not well understood. There are both examples of words alternating from b to m, and from m to b, and both Tsukishima (1969: 386-9) and Arisaka (1955:550-62) as cited in Martin (Martin 1987: 31) give lists of synchronic doublets. Martin proposes that these variations may all originate in –nP-, which should have given m, but which in some cases led to confusion. A similar alternation pattern is believed to have happened to –Nt-, but not to the same degree. (Ibid: 32).

2.4.6 Free and compound forms

One phenomenon that is important in the understanding of OJ and Proto Japanese morphology is the difference between the so called free and compound forms. Many Japanese words come in pairs, different only in the final vowel. There are mainly four types of pairs, as listed in table 3. The compound form is believed to the original form and which now only survives in compounds or in connection with the genitive particle *no*.(Frellesvig 2010: 45; Vovin 2005: 64-64) The free form is believed to be formed by the addition of a suffix /-Ci/, but the exact function of this suffix is not clear (Vovin 2005: 65). These changes suit the otherwise supposed vowel changes. Surprisingly, many plant names and plant parts have both free and bound forms. These differences will be discussed later, but I will list some examples:

Table 3: Examples of free and bound forms

Type of alternation	**Free form**	**Compound form**
wi~u	*mwi* ‘body’	*mu-kapari* (‘substitute’) ‘hostage’
wi~o	*kwi* ‘tree’	*ko-dati* (‘tree-stand’) ‘grove’
e~o	*me* ‘bud’	*moyasi* ‘bud, sprouting forth’
e~a	sake ‘saké’	*saka-duki* (‘cup’) ‘saké cup’

Adapted from Frellesvig 2010: 45

2.4.7 Verbs and verbal morphology

The perhaps most complex word group in OJ is the verb. The verb consists of a stem, on which suffixes are attached. Prefixes are rare, but some exist, such as the negative imperative na- 'don't'. In Japanese grammar, the verb is divided into various bases based on their vowels, and the verbs are named after this, thus monograde verbs have one vowel form, bigrade verbs have two vowel forms, while quadrigrade verbs have four vowel forms. Monograde and bigrade verbs are further divided into upper or lower, depending on the vowel: namely i or e.

Although the verbal form most typically associated with nominal compounding is the nominal form, called izenkei in traditional Japanese grammar (Frelelsvig 2010: 5) However, Martin notes the prescence of nouns and adverbs that end in –a that are related to consonant stem verbs. He notes further that it is the verb stem that must contain this –a. (Martin 1987: 65)

2.5 The sources

I have based my definition of OJ plant names on two large sources of data. The first one is the Jidaibetsu Kokugo Daijiten: Jōdaihen (ZDB), which comprehensively lists the words of the OJ language. This dictionary includes a wide array of sources, and it should be noted that it also includes some logographically attested words if they are attested phonographically in later sources. The second source is the Oxford Corpus of Old Japanese (OCOJ), which has a slightly narrower definition of what is included in Old Japanese: it bases its corpus solely on the songs (kayō 歌謡) from the various texts of the period, and to some extent the norito (祝詞 'liturgies') and semmyō (宣命 'imperial edicts'). The largest difference between these two sources when it comes to plant names is how the ZDB includes material from outside the songs

The larges collection of poems is the man'yōshū (MYS), 'collection of myriad leaves', which has 4685 poems comprising 83706 words, including some poems from Eastern Japan (aduma uta 東歌) and the borderlands (Sakimori uta 防人歌) which include material in what is called Eastern Old Japanese(EOJ). The Manyoushuu is a very important work because of its size, and although the style of writing varies much between logographic and

phonographic writing, there is much phonographic data in it, and many of the plant names that I have collected are attested phonologically. The remainder of the poetic material comes from various poems known as kayō (歌謡). These can be found in the remaining texts. Here is a list of all the poetic texts:

Kojiki kayō (KK)	(古事記歌謡; 712)	(112 poems; 2527 words)
Nihon shoki kayō (NSK)	(日本書紀歌謡; 720)	(133 poems; 2444 words)
Fudoki kayō (FK)	(風土記歌謡; 730s)	(20 poems; 271 words)
Bussokuseki-ka (BSK)	(仏足石歌; after 753)	(21 poems; 337 words)
Man'yōshū (MYS)	(万葉集; after 759)	(4685 poems; 83706 words)
Shoku nihongi kayō (SNK)	(続日本紀歌謡; 797)	(8 poems; 134 words)
Jōgū shōtoku hōō teisetsu	(上宮聖徳法王帝説; ?)	(4 poems; 60 words)

Information from the OCOJ website[4]

Five more collections of songs are included in Iwanami shoten's book on Old Japanese Songs, but as these are actually from the Heian period they are not included in the OCOJ, but the ZDB count these as old sources.

2.5.1 OCOJ

The most authorative collection of OJ texts is probably the Oxford Corpus of Old Japanese (OCOJ). It includes all texts that are considered to be OJ, also some texts that are written later but belived to retain the OJ language. This refers mostly to the peotry of OJ. From the nihonshoki, kojiki and fudoki, they have only included the songs (kayō) as noted in table 1, and not the main texts written in Chinese, but meant to be read in Japane. This has the downside that certain lexical items, including place names, are not included. The corpus also does not include old documents. This, I have been told is because of the old documents' mainly logographic nature, which makes their usefulness in linguistic research limited.

[4] http://vsarpj.orinst.ox.ac.uk/corpus/texts.html#texts [Last accessed 15.11.2014]

However, many of these documents can give valuable information about the use, distribution and knowledge of plants, and this is the reason why I would like to also discuss some of the plants mentioned in the ZDB based on their attestation in old documents.

2.5.2 Jidaibetsu Kokugo Daijiten: Joudaihen (ZDB)

The ZDB is a large dictionary published by Sanseido. The OJ edition is one volume big. It distinguishes between kō and otsu kana forms, and includes detailed lists of sources, fixed expressions and a clear overview of the use of the various characters used as man'yōgana(Cf. 2.5.3.3) As mentioned it is not as critical as the OCOJ, but draws upon several other sources to confirm words if their OJ attestation is vague. The ZDB writes all plants which are believed to be identifiable with their modern Japanese names and biological taxonomic names. For plant names the perhaps most important texts that are not considered OJ but which are very important for our understanding of OJ plant names and other lexical items, are the following four texts.

Honzou Wamyou – Names of Japanese materia medica

A text of two volumes, this book describes the Chinese names of plants, animals and minerals used in medicine, using man'yōgana. This book is useful for looking at the Japanese names for plants, animals and minerals which would otherwise be difficult to find information about in Nara and Heian sources. **(Omodaka et al. 1967: 880ff.)**

Wamyō Ruijushō – Selection of Japanese words sorted in groups

There are two versions, one ten volume version, and one twent volume version. The ten volume version is beleived to be finished beterrn 931 and 938 AD. The twenty volume version is believed to have been finished by the end of the the Heian period. This work describes Chinese glosses in a way similar to the Honzou Wamyou, giving definitions to each term, and Japanese glosses in man'yōgana. It has information both from known texts from earlier periods, but also from texts about otherwise little is known, and it is therefore a valuable text for working with Heian and Nara sources. **(Ibid.)**

Ruiju Myōgishō – Selection of etymologies of nominals

Check in ZDB. The Ruiju Myōgishou isa dictionary also known as 三宝類字集 (sanpō ruijishuu) and 三宝名義抄 (sanpō myōgishō). It has 11 volumes, and was finished during the end of the Heian period. **(Ibid.)**

Shinsen Jikyō – Dictionary of newly selected characters

This is a book of 12 volumes, and was finished some time between 898 and 901. A dictionary compiling various logographic characters including characters made in Japan known as kokuji (国字 'national characters'), and giving their Chinese and Japanese glosses. It was based on similar works from the Chinese mainland, including Yìwén Lèijù (芸文類聚) , and the Erya. The man'yōgana used distinguishes between the two types of *ko* (ko, kwo) found in older texts, and it includes many vocabulary items from OJ that are not found other places. **(Ibid.)**

2.5.3 Thesaurus Linguae Sericae (TLS)

The Thesaurus Linguae Sericae is a dictionary of pre-Buddhist Chinese texts which employs various tools in order to explore the lexical relations and syntax of classical Chinese. It allows for word searches for their context, as well as individual character searches, which give information about how these characters (i.e. words) were used, and prononuced. The pronunciation involves middle Chinese and classical Chinese reconstructed forms.(Harbsmeier amd Jiang) I use the TLS in this thesis mostly for ascertaining the presence of characters in texts that predate the Japanese ones, and to compare pronunciation in cases where loans are suggested.

2.5.4 Noticeable points about OJ texts

2.5.5 Writing practices

A number of writing practices were employed in writing OJ. This results in a variety of different types of attestations. A plant name can be written with Chinese characters, with or without a phonographic explanation, it can be spelled exclusively phonographically, or it can be a mix of logographic and phonographic writing.

2.5.6 Chinese characters

It is believed that the Japanese have exposed to characters long before the first texts. Classical Chinese was popular for writing in the earlier periods, but in Kojiki, Nihon shoki and Man'yōshuu we see innovative uses of these characters. The use of Chinese characters will be discussed later

2.5.7 Man'yōgana

The way of writing found in OJ to spell out Japanese words is called man'yōgana, named so after the man'youshuu in which it is common, but not exclusive. Man'yōgana is the practice of using Chinese characters in order to represent Japanese sounds, and this is the system that eventually developed into the kana-system in the Heian period. Man'yōgana can be divided into two categories: kun-gana (訓仮名 'kun-reading') and on-gana (音仮名 'on-reading'). Kun refers to reading out something in Japanese, while on refers to reading something in actual Chinese. On-gana is when a character's Chinese pronunciation is the base, for example the character 木 'tree' has the middle Chinese reading *məwk, and its on-reading in OJ is /mo/. In addition, the word 'tree' in OJ had two forms (cf. 2.4.1.5) /kwi/ and /ko-/, and therefore the character 木 could be used phonographically to represent all three: /mo/, /kwi/ and /ko/, in addition to be used logographically to represent 'tree'.

2.5.8 Different ways of using writing

The practices described above can be mixed, giving various different ways of attesting words.
Table 1: Logographic, phonographi and mixed writing

a.	海苔	nori	'a type of seaweed'
b.	乃理	*nori*	*'a type of seaweed'*
c.	縄乗	napa*nori*	*'a type of seaweed'*

In the above examples, a) is an example where Chinese characters are used for their meanings alone, here literally 'sea moss', to represent the consept of 'seaweed'. There is nothing in this composition that tells us how this word was pronounced. In b) however, two characters are used phonographically to represent a word with the sound /no.ri/, here representing seaweed. In the third example, the name for a type of seaweed *napanori*, is written half logographically (*napa*, 'rope'), and half phonographically, here with the character for 'ride', which is also

read *nori*. These half logographic half phonographic compounds are very common in writing plant names, as I will discuss later.

One interesting thing about kun-reading, is that in order for a word to have a kun-reading, there has to be a (native) Japanese word that is read in a specific way, that means the word to which the characters refer to. One good example of this is the plant name *si*, which is not attested many times, but which is sometimes[5] used to represent the syllable /si/.

One problem with the phonographic and logographic spellings is that in some cases it is difficult to actually know whether a word is spelled logographically or phonographically, mostly when using kun reading, it is sometimes difficult to decide whether the character reflects the etymology of the word, or if it is used solely for its sound value. One case reflecting this is the plant name *akane*, which is often written 赤根. 赤, meaning red, is used to write *aka*, and 根 'root', is used to write *ne*. Although most theories agree that the first part is semantically correct and that the part *aka* in *akane* actually means red, it is far more debated whether the part *ne* actually means root in this case[6] Furthermore, it is possible that these compounds reflect folk etymologies, and not the exact etymology of a given word.

2.5.9 Man'yōshū

Most of the plant names found in OJ come from the Manyoushuu. This is especially true for the OCOJ. The MYS definately has the largest part of phonologically attested plants. The many poems and large amount of phonographically represenations make it very useful. Although many words are attested only once, others are attested several times. The MYS is also very useful because it gives a context for many of the plants, which is not true in the same sense for for example the Fudoki. The contextual data is exploited by Japanese etymologists, which I will discuss further in chapter 2.2.2.

2.5.10 Norito and Senmyō

The Norito and Senmyō are written in semmyo-gaki, a way of writing where most lexical items are written with logographs, while grammatical endings are written phonographically with characters smaller in size than the lexical items. Despite this way of writing some larger

[5] It is used in both the manyoushuu and the nihon shoki in this function(ZDB, p. 895)
[6] See full discussion in 3.3.6

strings of text is written out phonographically, but the percentage is marginal. The amount of plant names in these texts are very limited, and only logographically attested.

The liturgies and edicts are used as part of the OCOJ, while the old documents are in ZDB, but not in OCOJ. For this thesis however, the semmyou and liturgies are not as important, as the texts are written in semmyou-gaki, a type of writing named so after the semmyou. Some words are spelled out phonographically, but these texts are most useful for looking at the syntax and morphology of the old Japanese language. [7] I have found no plant names in the data from the imperial edicts.

2.5.11 Fudoki - Gazetteers

Of all the OJ texts, the gazetteers stand out. The various Fudoki are descriptions of the land. Only one survives in its entirity: the Izumo no kuni fudoki. The Fudoki includes several poems, which are included in the OCOJ corpus, but the main texts which are written almost completely logographically, without any grammatical markings as those in the norito and senmyō. However, the Fudoki is the only attempt seen in OJ to sort and classify plants and animals, albeit only in the interest of topological information-gathering. For this paper I have used Iwanami shoten's annotated edition (Akimoto 1958).

2.5.12 Old documents

The old documents (komonjo 古文書) are old document fragments, mostly written logographically, but several have parts written phonographically. What is good about the old documents is that many of them are notifications on amounts of goods, and many of the ones that deal with plant names have the name of one or several plants, and a specified amount. In many cases these plant names are written phonographically. In addition to indicating that these plants were probably of a certain economic importance at the time, it also provides lexical information.

The old documents relevant for this thesis are limited to those cited as sources in the ZDB. Perhaps surprisingly, the old documents are important sources for names of various types of seaweed, and many types are only attested in these documents. They are all documents from the Nara period, the most representative years being the periods of

[7] I should find a source where this is found. Was it mentioned in Frellesvig?

tenpyoushouhou (天平勝宝 749-757) and tenpyouhouji (天平宝字 757-765). In the investegation of these sources, I have limited myself to the attestations in the dictionary.

In addition to the old documents being sources of additional information on many plants, 15 plants are according to the ZDB only attested in these old documents. Of these, 10 are names of seaweed, two are assumed to be trees for bowmaking, and the rest are believed to be a type of straw, a tree, and a vegetable The list of plants is as follows:

apasa	阿波佐	tusimo	都志毛
awe	阿恵	tunomata	角俣
awonori	青乃利	pimi	肥美
ogo	於期	punori	布能利,不野里
kakemo	可気毛	mega	売我,女我,嚢荷
kokoroputo	己々〔呂〕大, 心太	moduku	母豆久, 毛都久
sorasi	蘇良自	yupunori	木綿乃利, 木綿菜
tara	多羅,太良		

Although the old documents are not listed in the OCOJ because of their general logographic nature, only one of the plant names is written logographically (tunomata 角俣), three are written half logographically (awonori, kokoroputo, yupunori), and the rest are written phonographically.

2.5.13 Old Japanese dialects

There are dialectal differences in Old Japanese, generally recognizes as western OJ and Eastern OJ, and then again within Eastern OJ there are three branches: central, southern and northern, and some poems are difficult to place. There are not many cases where we have several names for one plant. Even when there are names that seem to have refered to the same plant, it is for OJ almost impossible to say with certainty that one word is just a dialectal variaty of another. There are a few cases of internal variation, such as kusi-kuri/kuru and sine-ine/ina, but these small phonological variations are not enough to be able to say anything about the motivation behind this naming, and these might not reflect dialectal variation.

2.6 Etymological theory

By looking at the many etymological dictionaries available, it is not difficult to see that the amount of etymological data written about the world's languages is enourmous, and many of these include plant names as part of their vocabulary. Some key features in etymological theory include the history of sound changes, foreign influences and dialectal or related language evidence. I would like to look at some works of etymology before I discuss the history of OJ plant name etymology in Japan. However, information on the specific etymological patterns found in plant names is scarce, and all the information I have been able to find is language specific.

2.6.1 In general

Etymolgical theory deals with the reconstruction of earlier forms, to see how words were created. Various methods are used in order to reconstruct a word, such as knowledge of morphology, dialectal differences and historical phonology. In the case of Japanese it is difficult to use external material, and internal reconstruction, which uses dialectal variation to recreate a proto form of a language, becomes very important.

2.6.2 In Japan

Etymological theory makes up the largest part of research done on plant names in Japanese. Several books deal with the etymology of plant names found in Old Japanese or later periods, but they mainly discuss various hypothesis based on similar words and context. However, in understanding the motivation and structure of these words, morphology and understanding of OJ phonology lays a very important foundation for further research.

Two main problems present themselves when talking about the etymology of OJ plants. These are 1)What does the plant name mean? and 2)what is its origin? In many cases a OJ plant name is used today as it was used a the time of compilation, such as *ine* 'rice plant' and *warabi* 'bracken', while others remain the same name but with various sound changes as described earlier, such as *kaerute*, 'maple', modern Japanese *kaede*, and *nuride*, 'Chinese sumak', modern Japanese *nude*. Some plant names that although they are different can still be traced with reasonable certainty, such as *kakati*, modern Japanese *hoozuki*, but we also have plant names which only occur a few times, and that we do not have enough evidence to be

able to identify with complete certainty, or where there is a high probability that although there is a similarly named plant in modern Japanese, the meaning has changed.

Several books tackle the ongoing discussions of Japanese plant etymology, but it seems like few attempts have been made from western scholars apart from where it is seen as fitting for the reconstruction of Proto Japanese or to understand general historical aspects of Japanese phonology or morphology. Several plant names and words related to plants show free and bound form variation, and a few examples are often mentioned in these cases, such as *nape-napa* ”seedling” and *kwi-ko* ”tree”.

Among Japanese works on etymology it is natural to mention the various dictionaries, such as the ZDB mentioned earlier, which often discusses the status and etymology of each plant name, but also the national Japanese dictionary – Nihon Kokugo Daijiten, which is also available online.[8] There are also some smaller works, such as the Koten Shokubutsu Jiten (古典植物辞典 Dictionary of Plant Names of the Classics) (hereafter KSZ). There are several other books devoted to more specific areas, like the ones mentioned later in this paper, that discuss each word in more debth. The theories in these books are often based on earlier discussions in plant name etymology and usually use historical or biological data in order to correct or confirm earlier theories. In cases where there is doubt not over the exact etymology of the word, but as to which plant a word refers to, this reasoning seems to be very useful.

The books written in Japanese usually have a non-linguistic perspective, and tend to emphasise non-linguistic data such as usage or history, but in cases several discuss historical phonoloy, but not always consistently. I will quickly summarize the works used in this paper.

2.6.3 The ZDB as a source of etymological data

The ZDB is an important source because it is one of the most serious sources of information on OJ data. However, often it does not attempt to look into the etymology of words unless the etymology is very transparent. It is the only work that discusses kō otsu syllables consistently.

[8] Reference to the website.

2.6.4 Nihon Kokugo Daijiten (NKD)

NKD summarizes etymological theories from a variety of different sources. It does not always show preference to any specific etymological theory, but in some cases it includes etymology in the definition of the word in question. The NKD is perhaps the easiest accessible way to get a quick and quite comprehensive overview of all theories written about various Japanese plant names. Some of the most commonly used sources of etymological information for the NKD are Wakun no Shiori (和訓栞 Guidebook to Native Japanese Readings, etymological dictionary), Daigenkai (大言海 Great Ocean of Words, dictionary), Nihon Shakumyou (日本釈名 Japan's Explaining of Names, etymological dictionary) , Wagoki (和語記 Records of Japanese Words) and the Touga (東雅 Eastern Elegance). The average number of etymologies per plant name is about 3, but several plant names have more than 10 different etymological theories from different sources. I have employed the digital edition through the course of this paper. I have used the online version.

2.6.5 The Japanese Language through Time

Martin (1986) however, with his reconstruction of Proto Japanese accent patterns, compiled a great list of nouns in which several plant names are discussed. The list naturally focuses on accent patterns and variations in accent patterns in other dialects, but in quite a few cases he also discusses the etymology of words. Although his list does not include all OJ plant names, I have taken his theories into consideration when discussing the words where applicable. He lists words by their NJ form, and then attempts to reconstruct them back to Proto-Japanese.

2.6.6 Koten Shokubutu Jiten (KSZ)

This book is especially useful for this paper because it lists all plants mentioned in various Old Japanese sources (Kojiki, Nihon Shoki, Fudoki, Man'yōshuu), as well as some later sources, namely the Kokinwakashuu, Makura soushi and Genji Monogatari. However, it is even less critical to the plant names encountered in the Fudoki, and therefore includes some plant names that are not found in the ZDB. The KSZ is especially occupied with defining the plants' referents, and writes much about which plants the plants from the Nara and Heian periods referred to. It also writes about the etymology of many of the plants, but not for all.

2.6.7 Gogen Jiten: Shokubutu hen

Gogen Jiten: Shokubutsu hen (語源辞典植物編 ’ etymological dictionary: plant edition’, hereafter GZS) is a book is part of a series on Japanese etymology, all written by Yoshida Kanehiko (Kanehiko 2001). The GZS is primarly occupied with modern Japanese plant names, but also mentions earlier forms for some of the plant names, such as kakati, although it is no longer used in NJ. It bases its definitions on earlier theories, and uses the NKD as one of its main sources, but in contrast to the NKD itself, it discusses the theories and use linguistic and historical data to prove or disapprove of various theories. For several plant names GZS also come with personal insight, especially in cases where he finds that none of the earlier proposed theories are acceptable.

2.6.8 Hosomi 1992

The book *koten no shokubutsu wo saguru* (古典の植物を探る ’examining the plants of the classics) written by Matsuo Hosomi (Hosomi 1992) is a good addition to Japanese etymological research. Hosomi discusses some plants individually, but mostly he uses a few examples to look at bigger settings. This book turned out to be very useful for me, because Hosomi discusses some topics that I will discuss in this thesis, albeit not at the same level. He talks about the relationship between plant name length and age, about how plant naming has changed over time, and also mentions several etymological theories.

2.6.9 Fukatsu 2000

The book *shokubutsu wamyou no gogen tankyuu* (植物和名の語源探求 research on the etymology of Japanese plant names) written by Takashi Fukatsu (Fukatsu 2000) is mainly useful for its deep discussions on the etymology of several common plants from classical Japanese literature, which also include many of the plants mentioned in OJ.

2.7 Plant semantics and motivational theory

Plant motivational theory often has to base itself upon the etymology of a word, and although one can easily find etymology without too much discussion on the reason behind the naming, it is difficult to discuss the motivation behind a word without looking at the etymology. In this respect, etymology lays the foundation of a discussion of plant names.

An interesting fact about plant names is that they can sometimes retain lexemes of words that are no longer in use, or they can retain forms that are markedly different from current forms. An example from English and Norwegian is the word rowanberry, in Norwegian rognebær, which refers to the berries of the rowan tree. Both *rowan* and *rogn* are related to the Old Norse word for red, and the English name is borrowed from Norse (Bjorvand and Lindeman 2007: 891). In modern English and Norwegian, the lexemes *rowan*/*rogn* are no longer easily identifiable, and the word *rogn* 'roe' in modern Norwegian, is not related to the tree name.(Bjorvand and Lindeman 2007: 891) However, through the historical study of these forms, one has been able to understand the original meaning of this word, and from that one could draw the conclusion that perhaps the red berries of the rowan tree are the most prominent and important feature for the people who use this word for the tree. These alternations are quite common in plant names in English, Norwegian and Swedish, to mention some, and they are in my opinon very interesting for looking at what variations can take place.

An example of this in Japanese is the old Japanese plant name *wominapyesi* (Cf. 4.1.243), which in modern Japanese retains its older form with only the loss of the wo-o distinction: *ominaesi*. The word *omina* 'woman', was shortened through the simplification of *mi* and the consequent assimilation of the nasal consonant, and is now *onna* in standard Japanese. This form of the word does not seem to be common, at least not in isolation in modern speech. Another example is the word is the Japanese *nubatama*, for which one theory is that *nuba* means 'black', and as 'tama' means sphere, it refers to the black berries of this plant (Cf. 4.1.133) There is no surviving word *nuba* or similar in modern Japanese, so it is hard to determine the probability of this etymology.

I believe that these two aspects of plant etymology are only part of what makes plant name research interesting and useful. According to plant name motivation theory, plants can also tell us much about how the people of that time thought about the plants.

2.7.1 Nordic research on plant names

There has been much research on plant semantics in Sweden, Norway and Denmark. Especially Sweden has a living botany and plant semantics tradition, emphasised by the recent

publishment of the book *Växter och växtnamn – ett möte mellan botanik och språkvetenskap* (Plants and plant names – a meeting between botany and linguistics) (Edlund, Larsson and Nyström 2013). Much work has been done on the history and motivation between individual plant names, but there are also larger works done on broader topics. A comprehensive summary of these works in Scandinavia can be found in Larsson (2013). Much research in Sweden in particular has been on the relationship between folk names and scientific name, and the relation between these.

2.7.2 Johan Lange and motivational semantics

Research on plant motivation deals with the reason behind why plants are given the names they are given. This topic is touched upon by many researchers who deal with plant names, but it is more often than not based on a smaller number of plants.

One especially striking work related to plant names is Johan Lange's work on plant semantic motivation in Danish (Lange 1966). His work is based on a three volume plant dictionary, Ordbog over Danmarks Plantenavne I-III ('Dictionary of Denmark's Plant Names') which he compiled himself (Ibid.: 7). In this work he analyses plant names that he calls *primitive*. His paper is heavily criticized (Dahlstedt 1967), but a large part of his theory is still useful for this thesis (Lange 1966: 35).

1) **place of growth**
   a) Direct
   b) Indirectly formulated
   c) Metonomically
2) **Time of blossoming**
   a) Direct (point of time)
   b) Direkte(span of time)
   c) Indirect
3) **Loathing**
   a) Direct
   b) Indirect
4) **Comparison with**
   a) organ
   b) animal
   c) human
5) **Comparison with**
   a) tool
   b) weapon
7) **Comparison with plant**
   a) morphologically
   b) usage-wise
8) **Sensing (Sensory)**
   a) vision
   b) touch
   c) taste
   d) hearing
   e) smell
9) **Direct naming**
10) **Effect**
   a) mechanical
   b) physiological
   c) psychic
11) **Application**
   a) food
   b) food (for animals)
   c) food (for humans)

c) clothing
6) **Comparison with**
a) agricultural product
b) fabrics, materials, etc.
d) medicin
e) tool
12) Games, fantasy and superstition

Lange also mentioned various things about plants, like the fact that he believes morphological simplicity to be a sign of plants that have been in a place for a long time.

I will use some of the basis of Lange's results to compare the Japanese data with, and I will also use it as a framework for looking at Japanese motivational theory, although I will not use the exact same categories as Lange, mostly due to the scarcity of the data. Note however that an analysis of more modern plant names could be very interesting, as the amount of data is larger, and it is easier to find plant names like *oniazami* 'Cirsium sp.'(lit. demon thistle) (Mizuno 2010), which uses words related to superstition, like *oni* 'demon' here.

2.7.3 Other nordic descriptions

Nordhagen is another name which is often mentioned in Scandinavian plant name research. **Johan Lange** mentioned that his work was partially inspired by **Nordhagen'**s work **(Lange 1966: 7)**, but **Nordhagen** has mostly written articles on narrower topics such as the motivation behind a specific type of name. Although not directly relevant for the analysis of Japanese plant names, these articles can give clues regarding similar processes and gives a hint at what kind of processes are common in Scandinavia when it comes to plant naming.

In an article about the plant names of Dalarna in Sweden, Sigurd Fries (Fries 1977) brings forth a few interesting points. He notes that plants that are commonly used tend to be more stable and have less dialectal variation. One plant that everyone in Dalarna knows very well is called by only a few names in the entire area, while other less well-known plants can have as many as 20 names in that area, and country-wise probably many more.

These articles provide important material for comparison, and can be used to support tendencies also found in Japanese. Although I have not been able to find

2.8 Taxonomy and biological classification

In this chapter I will discuss theory related to folk taxonomy.

2.8.1 Biological classification and taxonomic classification

In addition to the biological taxonomic system, this paper also discusses folk taxonomy as opposed to the scientific taxonomy. Biological taxonomy is important when it comes to identifying the different species, and when reading about Japanese plant names one often encounters biological taxonomic terms (学名 gakumei). When it comes to Japanese plant names in the etymological literature, the scientific notation is usually limited to the family name and the most common modern Japanese name, where the scientific name also helps disambiguate the modern name in case it refers to different plants. Specific variations are not mentioned, but variations that cannot be detected by the human eye are also not very useful for the discussion of plant etymology or naming.

However not all scientific plant names are set in stone, and as new discoveries are made in the field of biology, terms might change, or a plant might be moved from one branch to another. Just like in Norwegian and English, there is an easier version of the biological taxonomic system available in Japan in addition to the Greko-Latin systematic names. For example, the family Fagaceae, or beech family, is known in Japanese as buna-ka(ブナ科), where *buna* means beech, and –ka is the suffix indicating 'family', much like the latin endings '-aceae'. The term does not have to be based on the same species as the English name. For example, the grass family Poaceae is know as ine-ka, with *ine* meaning 'rice'.

This simplification of scientific nomenclature is one of the reasons why the study of old plant name systems are so interesting, as nowadays people might think that calling a plant a name that was traditionally given to that plant, but which is not systematically correct, is wrong, and therefore they correct it. Also, when new scientific families and subgroups are defined, names which are already used for one or several of the members of that group are used to indicate the genus (NJ 属 zoku), further restricting the meaning of these plant names.

One thing that should be noted is that in the ZDB some families are mentioned with older names for their biological groups, so that they use いばら科 ibara-ka and ほもの科 homono-ka for the families Rosaceae and Poaceae respectively, whereas in modern Japanese

these are known as ばら科 bara-ka and いね科 ine-ka. Note also that the ZDB use hiragana, or in some cases kanji, albeit not consistently, to write these groups. For example 稲科 and 菊科 instead of いね科 and きく科, ine-ka 'Poaceae' and kiku-ka 'Asteraceae', respectively. These variants are no different from each other. They are very commonly found written in katakana now. In this paper I have used the more recent names for these families.

Folk taxonomic systems on the other hand are systems used to classify plants, animals and the like, separate from scientific taxonomy. Categories made by these systems may or may not match with their botanical counterpart, but are usually divided in ways that are culturally important. The words *nut* and *fruit* in the common, non-biological sense of the words are examples of such categories. These categories are culturally dependent, and something that is considered a fruit in one culture may not be considered so in another.

2.8.2 Berlin et al attempts to systematize folk taxonomy

There are numerous descriptions of plant names in various languages, but not as many attemts to systemize these systems. Berlin et al. (year), however, presents one such theory, which has been retested by other authors, such asTerence E. Hays (Hays 1979), The proposed theory is based on various assumptions on folk taxonomies, and include some general remarks about how folk taxonomic systems are organized.

The theory lists several terms used in understanding a hierarchy of plants. In their collaborate paper *General Principles of Classification and Nomenclature in Folk Biology* Berlin et al. they mention five universal ethnobotanical taxonomic categories (Berlin et al. 1973: 215) which represent different levels in the folk taxonomic system, exemplified in the graph below:

Taxonomic term	**English example**
unique beginner	plant, animal
life form	tree, vine
generic	oak, bean
specific	lima bean, post oak
varietal	baby lima bean

The unique beginner is not universally explicitly marked, but the category of 'plants' is often present even in the absence of a term for the concept (Berlin 1975: 383). This can be examined in various ways, for example, counters can examined to see whether there is a specific counter for plants , by the amount of detail a language pays to detailed descriptions of

plant parts (Berlin 1976: 284), or it can be mentally precent without linguistic evidence (Ibid. 384-385). He goes on to argue that although there are certain exceptions in most languages, most languages show some degree of similarity when it comes to how the structure of plant names is organizedThe number of life forms is often not great.

2.8.3 The importance of taxonomic systems in plant names

Since OJ is a dead language, there are obvious limitations to to which degree Berlin's theory can be applied with any outcome. The material can hardly be used to judge Berlin's theory to the same as papers such as Hays', which have much more data from a living community, but I feel that it is useful because it can be used both ways: Berlin's theory can be used on OJ plant names to give us a rough idea of how the plant system probably was organized, based on linguistic and textual evidence, and we can also use Berlin's theory to see what is inprobable and what is probable in terms of naming and structure. Again, this structure let us look at the plants of the time not only as a list of plant names, but as a at least somewhat organized system.

3 The data

In this chapter I will discuss the data based on the theories and earlier research discussed in chapter 2 and 3. I will first look superficially at the names, and then look more at the individual plants.

3.1 Plants in the context of the various OJ sources

Here I will talk about how plant names are represented in the various texts mentioned earlier.

3.1.1 Plants in the Songs

It is interesting to look at how the various plant names are used in the various OJ data sources. Many books rely heavily on contextual evidence in order to confirm or disconfirm a theory about the plant name in question. One example of this is how Hosomi argues that OJ *wegu* should be seen as NJ *seri* (Oenanthe javanica), and not as *kuroguwai* (Eleocharis kuroguwai) (Hosomi 1992: 10ff).

kimi ga tame	For your sake
yamata no sapa ni	On the marshy fields between the hills
wegu tumu *to*	I have picked clematis and
yukige no midu *ni*	in the water of the melting snow
mo no suswo nure-nu	I have wetted the skirt of my garment

[MYS 10.1839] (Translation from Pierson 1958: 29)

Here, Hosomi uses both linguistic and contextual evidence. Since *kuroguwai* is picked for its edible roots, the have to be dug out, not picked. Hence, the verb *tumu* 'pick' is unnatural. Second, the word *yukige* 'snow melting' indicates that it is very early, and *kuroguwai* does not have leaves at this time, but *seri* does.(Ibid.)

I should site a few examples, from at least the white book and the etymology book). However, I would like to look at what some of this textual evidence can tell us about how plants were used in the period as well, without going into detail about each plant.

First of all it is important to note that most of the plants mentioned, at least in the different collections of songs, are used poetically, mostly because the many'youshuu is the

biggest contributor to our corpus of OJ. More concretely, they are often used in order to achieve a play on words, or as a type of poetic device known as makurakotoba(), 'pillow words'. These pillow words are words which are often used in combination with certain words, and each pillow word can be used with several, but often a limited set, of words. One example of this is *akane-sasu*. An example of word play is the word nanoriso, which in addition to referring to a kind of seaweed, is also homophonous to the phrase na-nori-so, the prohibitive form of the verb *nor-* 'to say'.

Many plant names occur frequently in specific phrases even if they are not part of these fixed expressions. For example, several plants are used together with the word *pana* 'flower', which shows us that the appreciation of the flowers of these plants was important for the people during the periods in which these texts were written. Some of the most common plants occuring with *no pana* 'GEN flower', *ume, pagwi, nadesikwo and sakura.* The plant tatibana is also commonly mentioned for its flowers, but as *pana-tatibana*, the flower-tatibana, perhaps as opposed to ape-tatibana, see 3.3.12.

3.1.2 Plants in Old documents and Engishiki records

Both the old documents and the sources which have most of the engishiki sources are documents where plants are listed in certain quantities, and often no additional information is given. These documents do not tell us much about the plants in general, but similar to the fudoki it is still valuable for lexicographic purposes. In fact, most of the plant names mentioned in old documents are written phonographically. These records do tell us that the plants that are mentioned were of great enough economic or cultural importance to be used actively, and it might be reasonable to assume that these plant names enjoyed a certain degree of stability.

3.1.3 Plants in the Fudoki

Although most plant names in the fudoki are written out logographically, with a few exceptions where local pronunciation is sited, they do give us a few windows into the world of plants at the time. One example of this type of in text comments is from the Hitachi fudoki (Akimoto 1958: 44).

海苔　俗云乃理

Seaweed (lit. sea moss) (In the) vulgar (language) (people) say *nori*.

As the plants are written with logographs, the scribes must surely have had access to information about these plants in Chinese in order to identify them. However, as the fudoki is believed to represent Japanese writing, not classical Chinese in the strict sense, we could assume that the distinctions used in the classification of the plants at least to some extent represents the distinctions existing in the Japanese language of the time, not necessarily the Chinese. One other thing to remember is that although many of the plants in OJ coincide with Chinese names, this is not necessarily true for the all the Chinese names in the fudoki. The lists of plant names show us that for example although sometimes ”amana” is believed to be a general term referring to non-pungent vegetables, and is used in such a way in the Norito the fact that it is listed in one of the lists can be taken as proof that it must , at least in addition to being a more general term, also refer to a specific plant (or group of plants), the specifics of which I will go into in greater detailed in chapter 3.

It must be noted that there are many plant names in the various fudoki that are not mentioned in this thesis. These plant names are limited to plant names that are not attested phonographically in the main text itself or in any complimentary texts. Some examples of plant names of the fudoki that are not analyzed in this thesis are 蜀椒 *narupazikami*、藍漆 *yamaasa* and 茯苓 *matupodo* (Akimoto 1958: 173). However, these are still very interesting, and would certainly benefit from further study.

3.2 Sources, interpretation and ways of attestation

This is where I should discuss how the plant names are used in each book! Considered revising the first part of the thesis and moving some of the information here. Especially the part from the fudoki.

3.3 Plant names in place names

Although for this paper I have not went over all the place names that are present in the various OC sources, it is worth mentioning that there are indeed very many placenames that, at least superficially seem to include plant names. Some of these are place names such as *apa-sima* ' millet island' in MYS.12.3167, an unknown place name. Following Lange's theories, one could assume that the plant names included in these place names are older than others. This theory is somewhat supported by the fact that most of the plant names that are included in the OJ corpus are two kana plant names, which are by themselves also believed to be older plant names because of the difficulty of determining their etymological origin and their short length, both which are criteria used to determine age of plant names.

3.3.1 Problems with plant names: Foreign loanwords

One problem is the definition of *Japanese* in *old Japanese plant names*. Although all the words that are identified as loanwords by various researchers are seen as native words today, and several of them such as kiku also undergo phonological processes usually reserved for more native vocabulary, such as rendaku, as in *nogiku 'wild chrysanthemum'.*

3.3.2 Chinese

In modern Japanese many plant names are based on Chinese, or at least Chinese characters, such as characters either in the form of names coined in Japan(I have no proof of this) or has loans from existing Chinese words, but in the plant names in OJ this was not as common.

There are four plant names that are found in OJ which are believed to come from Chinese. Three of these are dealth with in this thesis, and can be looked up in chapter 4. Two of these again are clearly mentioned in the OJ corpus, namely *ume* 'apricot' and *kiku* 'chrysanthemum', while one plant name is slightly more disputed, namely kaparapudi, which is listed as saukepu in ZDB. The fourth plant is *mokurani* 'magnolia', which in fact is not mentioned in the OCOJ or ZDB, but in the KSZ because it is attested in the Hizen no Kuni fudoki. It will not be dealth with in this paper, but it will suffice to say that it is the japanized reading of the middle Chinese 木蘭 (*muk - lɑn, lit. 'tree orchid').

3.3.3 Korean

Korean also contributes several words to Japanese. Vovin (Vovin 2007) discusses how several doublets can be found in Western Old Japanese, and looks at evidence for these being loans from the Paekche language that was spoken at the time.

Although there were no plant names discussed in Vovin's paper, it nevertheless tells us that there indeed was a stream of Korean influence on the lexicon of OJ. With doublets like the one discusses it might be easier to pick out, but in cases where there are no doublets, how can we tell? GZS is one of those who argue for a Korean origin of several plant names, and others have also proposed theories for a few words.

It is believed that a few plant names came from Korean. The plant karamusi 'ramie' is believed to be kara 'Chinese; Korean' + *musi* 'ramie' (Korean *mosi*). The other one is *uri* which is very interesting. It means 'melon'. (Frellesvig 2010: 147)The interesting thing is that this word seems to be very general, and even has subgroups such as *kamouri* 'winter melon.' There are other words relating to gourd-bearing vines, but the only other melon-word in the OJ corpus is *pisago*, a word which is more specialized than *uri*, and the surviving word for melons and gourds in modern Japanese is *uri*.

Therefore, both *uri* and *ume* seem to be quite old loans, because it seems they were already at the time of OJ productive and used in compounds.

3.3.4 Ainu

Ainu is an interesting source of loanwords. Batchelor in his 1905 dictionary of the Ainu Language (Batchelor 1905) suggests that the Japanese *aduki* 'red bean' and Ainu *antuki* 'red bean' might be related. However, it is hard to decide which direction these loans went. His dictionary reveals several other cases of similar-looking words:

kiapa/piapa 'millet*, OJ *apa 'millet'*

pi, piye 'seed' [9], OJ *piye* 'millet'

emo 'potato' , OJ *umo* 'taro'

kombu/kompo ' a kind of brown sea-weed' , not in OJ, NJ 'konbu' 'a type of seaweed'

[9] (Also in Hattori 1964),

membiru/mempiru/mempiro ’a wild garlic’, OJ *piru* ’leek’

moma ’plum’, OJ *momo* ’peach’

mungi ’wheat’, OJ *mugi* ’wheat’

nisesseri/kisesseri/risesseri’ a kind of water cress’,

seri ’ Oenanthe stotonifera’, OJ ’seri’.

It is outside the scope of this paper to dwell on these terms and try to decide which term has gone which way, but it is interesting to note that millet, barley and wheat has been important for the Ainu for a long period of time.(See for example Gary W. Crawford and Masakazu Yoshizaki. 1987)

3.3.5 Problems with representation

As mentioned earlier, plant names can be represented in three ways: phonogrphically, logographically or mixed. The OCOJ has all these different versions tagged, and emphasises the use of phonologically attested forms. Phonographically attested forms are more interesting and useful to the study of the OJ language because all other attestations do not actually tell us what is written. Although the readings of logographically attested words can be guessed with a certain level of accuracy, based on annotations and later texts which use the same characters, there is always an element of uncertainty.

3.3.6 Phonographic representations

Phonographic representations represent a quite large part of the corpus, about 140 names are attested phonographically, which is roughly half of my data. Most plants that are attested phonographically also have a logographic spelling. However, a few plants are only attested phonographically, which can lead to various problems. First of all, these are often found in documents that are not of the most widely used, such as the old documents. Second, since there is no logographical representation at all to link the phonographic representation to, it is sometimes difficult to determine exactly which plant the different names refer to, which for example is the case with a lot of the plants attested only phonographically in old documents.

3.3.7 Mixed representations

Mixed representations are interesting because of which part is written phonologoically, and which part is written logographically. The typical construction of these words is that the semantically weakest element is often represented logographically.

For example, the word apetatibana/abetatibana is attested as 阿倍橘, which without looking into the etymology itself, can be treated as a 阿倍 abe type of 橘 tatibana, here

In a similar way, the name yamadisa　山治左, can be seen as beeing a 山 yama type of 治左 tisa (here: disa).

The word tatibana is common in the OJ corpus: 45 instances, whereof 10 are attested phonographically. This could perhaps be a sign that the word is very common, and the more important information here is not that it is a type of tatibana, a plant that people were lilely to know, but it is the fact that it is an *ape/abe* type of tatibana. The same is true of yamadisa, where the word *yama* 'mountain' is far more common than the word tisa, which is only attested once in the OCOJ corpus. This is a quite general observation, and goes for all mixed words.

3.3.8 logographic representations

As mentioned before phonographic representations are valuable especially for their linguistic information. However, when looking at the plant system as a whole, the logographic representations can also be quite useful. One important part of the logographic representations is that they do in a way provide us with information that could not have been available through a phonographic representation in itself. Since these representations use kanji, there must have been some reason behind the choice of kanji. Although the use of Chinese characters used to write Japanese plant names are not always correct if seen from a Chinese point of view, but nevertheless it does tell us something about how people viewed their plants. I would like to discuss a few general trends that can be seen through this kind of representaiton. Also, as mentioned earlier the plant names listed in the fudoki, are, although rarely phonographically attested, valuable for our understanding of which plants were different from others, and the composition of the characters are supposedly not random, they do give us information about a kind of etymology, that could either have been imported from

the mainland, or invented by the Japanese themselves. This is hard to tell, but in some cases one can look at the oldest Chinese texts and see to which degree there is a correspondance between the plant names written with characters in OJ fit the plant names described in some of the earliest Chinese works that deal with plant names such as the shennong bencao jing or the erya.

In some cases it is actually difficult to decide whether a plant name is phonographically attested or logographically attested. If the spelling a word also coincides with its etymology, then it is considered to be logographic, but in case it does not, it is considered phonographic, which openes for a wide array of various etymological interpretations.

In cases where there are logographic attestations that are not purely Chinese characters for an already established plant term (葵、柏、Etc.), I will assume that they indicate at least the folk etymology, if not also the true etymology of the word. If a plant name has been given a folk etymology because it is a loanword that has been assimilated to (Old) Japanese phonology, it is nearly impossible to distinguish these without more external evidence, and for the purposes of this paper I will assume that they are indicative of the true etymology.

3.3.9 Unattested plant names

One problem with looking at a limited corpus of plant names from an old period is that we are bound to found some holes in our knowledge. When it comes to plant names, it is unlikely to believe that the list of plants given here is anything close to representing the actual plant names of the time. There are at least two reasons for this. One is that in modern Japanese we do have many more plant names, and some of these may represent older creations. Surely some of these must have been available in the Nara period as well. Second, data from minority languages show that individuals have knowledge of close to a thousand plant names each.**(Source!!)** Adding the posibility of each area having many local names for the same plants, gives us a possibilty of several thousand plant names. Since there is no lack of evidence in the Man'yōshuu of descriptions of people harvesting wild greens, it should not be unreasonable to assume that they were quite knowledgeable of wild plants.

4 Analysis

In this chapter I will first summarize and discuss etymological theory in chapter 4.1, then I will use the information from chapter 4.1 to look at morphological, motivational and taxonomic peculiarities of OJ plant names.

4.1 Etymological analysis

In this chapter I will summarize and discuss various etymological analysis of each plant name when applicable. The sources utilized are: The jidaibetsu kokugo daijiten: joudaihen (ZDB), Nihon kokugo daijiten (NKD), kodai shokubutsu jiten (KSZ) gogen jiten: shokubutsu-hen (GZS) and Martins list of nouns in the Japanese language through time. I will also look at some of the motivation behind each etymology.

The plants are listed alphabetically, with a short discussion of etymological theories proposed in other works. In cases where no etymology is given in the works mentioned, I will try to propose one myself. However, in some cases there are too many etymologies, especially in the case of di- or monosyllabic nouns, and in certain cases I have found that it is beyond the scope of this paper to discuss the status of these problematic plant names.

I have put most weight on the theories in GZS, as these build upon the ones already gathered by the NKD. I will however discuss cases where I feel like there is a need for further elaboration or if I feel that there is reason to doubt the theories. Plants whose discussions do not contain references to any of the etymological works are my own.

The English names are based on translations of modern Japanese names. As all plants in OJ have a certain degree of incertainty, these translations should be seen as a guideline, and the OJ plant name might not be biologically identical to the plant most typically associated with the English name given here. After the plant name means that there is some debate regarding the actual identity of the plant. All words suggested in GZS are written here to suit OJ, even if they are not explicitly meant to be OJ. The genetive particles *no*, *ga* and *tu* are simply glossed as ‘GEN’.

A note on the word *kusa*: In modern Japanese, this can be translated as grass, weed or herb, but when used as the second element in plant names I feel like the gloss ’plant’ is much

more appropriate, as in this position this term is used to refer to any leafy, non-woody plant. It does not have the grassy feeling of *grass*, the unwanted feeling of *weed*, nor the feeling of usefulness of *herb*. In a similar fashion I have chosen to gloss *kwi* as 'woody plant', as it does not purely refer to plants that would be known as trees today.

4.1.1 adimasa – areca nut

GZS believes that this plant got its name because of its use as fibre, so that he believes adima comes from aduma, which he believes is the mizenkei form of adimu 'gather' + asa hemp. Note that there is a word *adi* in ZDB that is not identified, that could refer to a type of tree, but its attestation is too uncertain to be able to say anything, and it could be a misspelling for *matu* 'pine'.. However, 'gather' in OJ is only attested as *atum-*, which makes it necessary to account for both the vowel change and the nasalisation. Perhaps it could be related to *adi* 'taste', since it was used as food. Cf. *adisawi*, which also has a slighly uncertain etymology.

4.1.2 adisawi – hydrangea

ZDB mentions that in the Wamyōshō it is also attested as *adusawi*. GZS does not draw any firm conclution but says that it is probably either adusa '*Betulaceae* sp.' + *awi* 'indigo', or atu+fusa+awi. In both cases *awi* 'indigo' is said to be used because of the colour, and GZS mentions that the leaves of *adusa* and *awi* are also slightly similar. The second theory is slightly problematic as it does not explain the nasal element, and the only verb attested as *atu* in OJ is *atu* 'hit', but the first theory makes sense, but it still leaves the question of the difference between the form with *di* and the one with *du*.

4.1.3 aduki – red bean

There are several theories about this name. Batchelor (1905) lists this as one of the words he believes has been borrowed into Japanese from Ainu. GZS believes that this word came from Hindi, or that it came from Chinese through the reading of the character 豆, which he says changed like this: dug > dəg >təu, and that this was borrowed into Japanese as *duki*, with the prefix a-. I find this difficult to believe, first of all because KLS reconstructs 豆 as ***doos (?)*, for Old Chinese, and in Middle Chinese it became **du* and it is not clear what the meaning of the prefix a- is.

4.1.4 adusa – *Betulaceae* sp. (?)

As with *adisawi*, GZS proposes that *adusa* is *atu* ‘gather’+ *pusa* ‘tuft’, but it is still difficult because of the nasal element. Martin also reconstructs it as having a nasal element. ZDB notes that it might refer to either NJ *azusa* or NJ *mizume*, both which are members of the birch family.

4.1.5 akakagati – Red Japanese lantern plant

This plant is most likely, as the ZDB menions, *aka* ‘red’ + *kagati* ‘Japanese lantern plant’. It might not be a specific species of Japanese lantern plant, but just emphasing the colour of the plant. The husks turn bright red, and this is the most probable motivation behind the name. Cf. *kagati*

4.1.6 akane - madder

The etymology is most likely *aka* ‘red’ + *ne* ‘root’. ZDB notes that it was used as a red dye, and this is probably the motivation behind the name.

4.1.7 akinoka – Pine mushroom

The etymology is most likely *aki* ‘autumn’ + *no* ’GEN’ + *ka* ‘fragrance’. This refers to this mushroom’s peculiar and highly valued aroma. However, the ZDB translates this more accurately as ‘the scent of pine mushrooms’, and it could very well be a special way of referring to the plant, and not necessarily the most common name of the mushroom itself at the time.

4.1.8 amana – Brassicae sp. (?)

The ZDB notes that this plant is believed to be *ama* ’sweet; tasty’ + *na* ’greens’, being used as a collective term, contrasting with *karana* ’spicy; pungent greens’ (cf. 4.1.63), It is also possible that *amana* refers to types of types of turnips, while karana refers to types of onions.

4.1.9 apa – millet

GZS says that *apa* comes from *apani* ‘many’, because of the many seeds on one ear of the plant. The word *apani* is in ZDB, but the meaning is somewhat disputed, although the most probable meaning is as GZS mentions, ‘many’. Note that there also is a similar word in Ainu: *kiapa*, *piapa* ‘millet’(Batchelor 1905), and it is not impossible thtat it is a loan from there. Note that *pi* means ‘seed’ in Ainu. (Cf. 4.1.155)

4.1.10 apaki – Japanese laurel (?)

Since this plant name is attsted with *ki*, it should not be ’tree’(kwi), unless it is a spelling mistake. The ZDB notes that it is difficult to find the referent, but that it might refer to NJ *aoki* (*Aucuba japonica*), saying that the sound change /pa/=>/o/ is acceptable. GZS mentiones NJ aoki, and writes that this plant name comes from NJ *aoi ki* ‘green tree’, because both the leaves and branches are green. It is more difficult to establish a connection to the adjective awo ‘blue; green’ to *apa-* in OJ, as no other words in the ZDB have apa- as having this meaning. In addition, ZDB lists it with *ki*, not *kwi* ‘tree’. Thus NJ aoki could very well come from *apaki*, but with ‘green tree’ being a folk etymology. Cf. *apasa*

4.1.11 apasa – (a kind of) seaweed

The etymology and modern name for this plant are all disputed. As with *aoki*, it is possible that it might be related to *awo* ‘green; blue’, and –sa is found in several plant names, and could be related to *kusa* ‘grass; leafy plant’. However, the word *apasa* is not directly dealth with in and since the etymology is uncertain, i would like to leave this word for now.

4.1.12 apetatibana – a type of trifoliate orange

The composition of this plant name is *ape* + *tatibana* ‘trifoliate orange’, but the meaning of *ape* is not as certain. The ZDB mentions that it could be related to one of the lower bigrade verbs *ape-* ‘resist; endure’ *or ape-* ‘treat (people with food)’ Among the theories listed in the NKD, the theories that *ape* either refer to its use *as* food, or its use *in* food seem likely, both theories suggest that *ap-* ‘treat (people with food)’ is the etymology, but the motivation is slightly different. This could be in contrast to the normal tatibana which is often valued for its flowers. Cf. *tatibana, karatati, yamatatibana.*

4.1.13 apupi – Chinese mallow

GZS suggestst that it comes from apu ’meet’ + *pi*’ sun’, because it turns towards the sun. He also suggests it coming from Korean ahok, but his theory is somewhat awkard, as he suggests that Korean h turns into OJ /p/.

4.1.14 aputi – white cedar

There are three etymological entries in the NKD, but none of them seem likely.

4.1.15 araraki - wild leek (?)

The phonological status of *ki* is uncertain. KSZ has araragi, while ZDB has araraki. There is some disagreement regarding the referent. ZDB believes that araraki is wild leek (NJ *nobiru),* but also notes the word *sapaararaki* (NJ *sawahiyodori,* ‘Eupatorium lindleyanum’), written logographically as 沢蘭 (’marsh araraki’) which is only mentioned in a footnote in the MYS, and is neither in the OCOJ nor does it has its own entry in the ZDB. Its flowers are somewhat reminiscent of wild leek flowers, and this could perhaps the link between these two plants. However, the flowers of *yamaararaki* (cf.4.1.246) look different. KSZ has *araragi*, and translates it as NJ *pudibakama* (cf. 4.1161), which is very similar to NJ *sawahiyodori*. Martin suggests that the etymology is ara-[a]ra-n-ko-Ci (Martin 1987: 383), GZS agrees, but suggests *ki* ‘onion’ instead of *kwi* ‘tree’, and identifies *ara* as ’sparce’.

4.1.16 asa - hemp

GZS suggests that this comes from *awo* ‘green’ + *swo*’ hemp. The word *swo* is only found in compounds, and is also believed to mean ’hemp’. This would mean that *swo* is an older word for hemp than *asa*. This is supported by the many NJ dialectal words for hemp ending in –so (Hattori 1996: 745)

4.1.17 asadi – young bloodgrass

GZS suggests *asa* ‘shallow’ + di ‘bloodgrass’, but forgets to mention the nasal element. I believe it would have been something like *asa* ‘shallow’ + no ‘copula’ + *ti* ‘bloodgrass’. It is called so because it is presumably shallower, lower in height, than the fully grown *ti*.

4.1.18 asagapo – morning glory (?)

ZDB notes that finding the referent to this plant is difficult, as one attestatio indicates that the plant does not flower in the morning.

asagapo pa	*The convulvus,*
asatuyu opite	*carrying the morning dew*
saku to ipedo	*will open, people say, but*
yupukage ni koso	*in the morning shade*
saki-masari-*kyere*	*it will blossom still more!*

[MYS.10.2104](Translation from Pierson 1958: 287)

Although it might be difficult to establish the referent, the etymology is still most probably *asa* 'morning' + *no* 'GEN' + *kapo* 'face', where the genitive marker has been reduced. The motive behind this name could be that the plant blooms in the morning, and it could be that the plant was not correctly identified in the above poem, or that the plant name *asagapo* was used more broadly to refer to plants similar to the typical *asagapo*.

4.1.19 asi – reed

GZS says that the etymology is *asi* 'foot', because it grows in waters shallow enough for one to stand in. He also mentions that it could be related to the word *asa* 'shallow', but he concludes that the plant got this name from the human body part. However, if the NJ forms asi and yosi both come from the same source, this theory is slighty problematic. There are dialectal forms like *ayosi*, *tutuyosi* and *yosidake* in NJ (Tokugawa 1996). Perhaps the first one could give us a clue. The word *a 'feet'* is attested in compounds and on its own. Could it be that the name comes from *a* 'feet' + *yosi* 'good', referring to its roots growth habits of making blankets under the ground, i.e. it is firmly attached.

4.1.20 asibi

GZS believes that this word comes from a changed from asibi from the nominal form *aswobi*, of the quadrigrade verb *aswob-* 'play', because it is used when playing. However, it is difficult to confirm this theory because of the different vowel.

4.1.21 asituki

The etymology of this plant is most often believed to be *asi* ‘reed’+ *tuki* ‘stick’, from the quadrigrade verb *tuku* ‘stick; attach’, because it grows on reed. This theory is supported by the logographic representation 葦附 ‘reed-attach’.

4.1.22 atane – a type of indigo (?)

Although the exact reference of the plant is uncertain, it is believed that it might be some kind of water pepper. ZDB suggests that it might be *ata* ’other’ + ne ’root’, because it comes from China. *Ata* is the root of the adjective *ata-si* ‘other, different’. It is also believed that it might be a misspelling for *atate*/atade, and that it refers to a type of *tade ‘knotweed’*.

4.1.23 awe – uncertain

ZDB has no other information than that it is used as material for bows. It is not listed anywhere. Since this plant is not treated anywhere, I find it difficult to guess too much about the origin of its name, and I will leave it for further research.

4.1.24 awi – indigo

GZS writes that the plant name is derived from *awo ‘blue; green*’, as this plant was also used for blue dye, and proposes the change *awo->awi* (NJ => *ai*). Its name is also found in several other plants, most noteably *kurenai*. Note however that *kurenai* is a red-pink dye plant. This could perhaps indicate that *awi* was also used more broadly in the sense of ‘dye plant’. See also *adisawi, kurenawi*.

4.1.25 awonori – green laver

The most probable etymology of this plant name is *awo* ‘green’ + nori ’seaweed’. Perhaps to separate it from other differently coloured seaweeds such as brown and red seaweed. Cf. *nori.*

4.1.26 ayamyegusa – sweet flag

Probably *ayamye* ‘girl from china’ + *no* ‘GEN’ + *kusa* ‘leafy plant’, with a reduction of the genitive particle. The word *ayamye* is attested in OJ, and GZS agrees that this might be a probable origin for this word. The plant is probably compared to the beauty of these girls.

4.1.27 azami – thistle

GZS says that the theory from the Daigenkai, that it comes from the verb azamu ‘to remonstrate’, because of the spikes, but in NJ it seems to have been more commonly *asamu*¸and in OJ there is no attestation of this verb, which makes it difficult to account for the voicing.

4.1.28 azasa – water fringe (?)

The translation of this plant name is disputed, and it is hard to say something about the etymology. Note that there are other plants in the corpus with difficult etymologies, ending in –sa. Cf. *apasa.*

4.1.29 e – perilla

GZS cites a theory from the meigentsuu (名言通) that the etymology might be *e* ‘acquire’ from getting oil from the seeds, but personally he thinks that it is from e ’good’ because of the good taste. However, ‘good’ is *ye*, making this theory problematic. Cf. *e (hackberry)*

4.1.30 e – hackberry

GZS proposes that the e comes from the berries being tasty, and that it could be the same as from e ’fodder’, NJ esa, but ‘fodder’ is attested in ZDB as *we*. However, both *e ‘perilla’ and e* ‘hackberry’ are attested as *e*¸ while ‘good’ is *ye*, the root of the adjective *ye-si* ‘good’.

4.1.31 ebi – grapevine

Both the ZDB and GZS suggest that the name might come from *ebi* ‘shrimp’, because the root is somewhat reminiscent of a shrimp’s joints. According to the ZDB it is also known as *ebi-kadura* (‘ebi vine’). *Ebi* ‘shrimp’ is not attested in OJ, but Martin (Martin 1987) reconstructs it, and ZDB notes that it is attested in the Heian period. Note that several vines with berries or fruits have names that end in *–bi,* such as *asibi* and *itabi* in this thesis and NJ akebi ‘Akebia’. Cf. *asibi, itabi.*

4.1.32 igisu – a type of seaweed (Ceramiaceae sp.)

This plant is not treated in neither NKD or in GZS, so little is known about its etymology. There are no similarly named plants in the OJ corpus, and because of this I believe that it is better to leave this name be, rather than to go too far in guessing its etymology.

4.1.33 ine - rice

GZS first talks about how it could be related to sundanese bhini or Javanese wini. Then he talks about that if *ine* has Japanese origins, it could perhaps be related to the verb *inu* 'sleep', which he mentions has been written with the character for rice once. However, *ine* 'rice', also has the forms *ina* and *sine*, and the verb inu does not share these forms. The presence of a compound form indicates that there might have been consonant loss, or at least that *ina* is the original form. Cf. *yone.*

4.1.34 ipadokasipa – a type of moss (?)

It is reasonable to believe that this plant is composed of the two elements *ipado* + *kasipa*. However, as this is a very different type of plant than kasipa itself, *kasipa* is perhaps used mostly as a comparison of some part of the plant, rather than *ipadokasipa* being a type of *kasipa*. The ZDB notes that some (including OCOJ) treat this as *ipa to kasipa (to)* 'stones and oaks' *ipa* might be 'stone', but the status of *to* is unclear. Perhaps in reference to its growing habitat.

4.1.35 ipawitura – uncertain ?

This plant name is not discussed in the GZS. This plant is composed of *ipawi* + *tura* 'vine', but the status of *ipawi* is somewhat uncertain

4.1.36 isasa – small bamboo (?)

The ZDB mentions that plant also has the variant *yusasa*, and since there is a word *yu/i* that exhibit the same sound changes, it is possible that it is indeed is *yu/i* 'holy' + *sasa* 'small bamboo'. ZDB writes that the word *i/yu* is commonly placed in front of holy objects.

4.1.37 itabi – *Ficus nipponica*

The etymology is not clear Cf. *ebi, asibi.*

4.1.38 itadori – Japanese knotweed

GZS writes that the etymology of this plant is *itami* ‘pain’ + *tori* ’taking’, because it has been used to relieve pain. The reduction of *mi* accounts for the nasalization. See also *tadipi.*

4.1.39 itibikwo – strawberry

ZDB translates it as NJ itigo ‘strawberry’, but mentions that some earlier attestations might have referred to similar but different berries. GZS explains *itibiko* as *iti* ’very’ *pi* ’red’ *ko*’ thing’. However, this does not explain the nasal element, and the word *pi* ‘red’ is not attested in OJ. Martin reconstructs it as it *it$^{i}/_{u}$-n-pi kwo. It could be that it is related to itu ‘lush’, which could be the same for the other plants in the corpus that has *iti-*: *itipi, itisakakwi, itisi.*

4.1.40 itipi – *Quercus gilva*

GZS writes that both itipi and and itibiko can come from iti \very\ + pi ’red’. However, the word *pi* ‘red’ is not attested in OJ. Lack of attestation in OJ is not an absolute proof that it did not exist, but since Chinese loans were scarce at the time it is not likely that it should be used in a compound like this like an adjective. I believe the etymology to lie elsewhere, but it is uncertain. Cf. *itibikwo*

4.1.41 itisakakwi – *Eurya japonica (?)*

Seems to be *iti* + *sakakwi*, What does the ZDB say? It seems to have been used in religous practices, which matches with *sakakwi*. *Iti-* might be the same as *itu* ‘lush’. Cf. *itibikwo.*

4.1.42 itisi – a type of sorrel

The name itself is disputet. ZDB notes that it might refer to NJ *gisigisi (Rumex japonicus)* as *si ‘sorrel’* is attested in OJ. The element *iti* is more uncertain, but it could perhaps be the same as *itu* ‘lush’. Cf. *itibikwo.*

4.1.43 kabura - turnip

GZD believes that it might come from *kabu* ‘head’, which is also attested in OJ. However, the –ra is more uncertain. The motivation behind the name is nonetheless based on its similarity to a head.

4.1.44 kadi – paper mulberry

GZS Writes that the etymology is *kaki* ‘row’ + *moti* ‘hold’, where ti became voiced. The word kadi also means ‘rudder’, and the motivation is perhaps that this wood was often used to make rudders. However, this plant is also known as *kadu* in eOJ, which might indicate a possibility that the underlying form of *di* is *du*, which weakens the etymological suggestion.

4.1.45 kadura – vine

The ZDB mentions convincingly that this is *kami* ’hair’ + *tura* ’vine’, *kamitura* where *mi* is reduced, creating *du*. The motivation might then refer to the vines used as a hair ornament, and the ornament itself, and after that it came to be used to vines used for this type of ornament, and then it came to be used to vines in general. It is seen in several plant names in OJ.

4.1.46 kagami

This plant is not mentioned in GZS or in KZS, and the ZDB does not talk about its etymology. There is a quadrigrade verb *kagamu* ’bend; curve’ listed in ZDB, and perhaps it could be the curving habits of this plant that gave it this name.

4.1.47 kagati – Japanese lantern plant

One connection mentioned in the ZDB is how the word kagati is also used about the eyes of snakes. It is however, not sure which one is named after the other. This is one of several plants where there is believed to be a connection between a none-plant word and a plant, but where the exact direction of semantic change is difficult to confirm.

4.1.48 kage – club moss

This plant is probably related to *kage* ’shade’. This is probably due to the living conditions of moss: damp and shady.

4.1.49 kakemo – a type of seaweed

The word *kakemo* is attested phonographically in old documents. It is only mentioned in ZDB, and no etymology is given. It could be related to the verb *kake-* 'to hang; to ' , whose nominal form is also *kake*, which is also attested in OJ, and which has the same phonological attestation. This plant name would then translate as 'seagrass which hangs', which could refer to it's location in the sea, or perhaps on rocks in the shore. However, as the verb kaku is uniquely transitive, this would be 'seaweed that one hangs'. There is also a word *kakye* 'chicken' , but it would have to be a misspelling in order for them to be related.

4.1.50 kaki

GZS says that there is no doubt that the word *aka* 'red' is part of the etymology,and that it comes from *aka* + *ki*, but he is uncertain whether *ki* is 'tree', 'adjectival ending' or 'yellow. Since kaki is not attested phonographically, it is impossible to include or exclude any of these.

4.1.51 kakitupata – *Iris laevigata*

GZS says that the common theory is that it comes from *kaki* 'scratch' + *tuke 'place' pana 'flower'*, because *pana* can show n-d-t variation, according to GZS. The motivation is unclear It is somewhat strange that this d-n variation is seen in the word *pana*, because it is so common, when the otherwise structure of the word seems to suggest quite recent compilation because it is long and has few contractions. Since there are no other examples of *pata* for *pana*, it is strange that this long compound has it.

4.1.52 kama – cattail

GZS cites two theories: One is that it comes from kumi 'put together', as he says is also true for *komo*. However, he does not explain how the change from *kumi* to *kama* has taken place, and I find the vowels a bit too different to accept this theory easily. There are two other words which share the same structure: *kama 'sickle' and kama 'pot'*, but it is not certain whether any of these could have anything to do with the etymology.

4.1.53 kamira - chives

ZDB takes this to be *ka* ‘fragrance’ + *mira* ‘chives’, because the leaves emit a strong smell. Cf. *mira.*

4.1.54 kamouri – winter melon

The etymology of this word seems to be *kamo* + *uri*, but there are two candidates for *kamo.* ZDB suggests that it might be *kamo* ‘woven carpet’, because the young fruit is covered in hairs.It could also be *kamo* ‘duck’, but the motivation would then be a bit unclear. Both words are attested in OJ. The word *uri* in itself is slightly more problematic. See *uri.*

4.1.55 kanakwi

THe ZDB believes that this word comes from *kana* ‘metal’ + *kwi* ’tree’, because of its hard wood, but it is uncertain what the plant name itself refers to. *Kana* is the compound form of *kane* ‘metal’

4.1.56 kapamo – river greens (?)

The etymology of this plant name seems to be *kapa* ‘river’ + *mo* ’seaweed’. Fries notes that although scientifically there are differences, there is no reason to divide plants living in freshwater from those living in salt water (Fries 1975: 45). Therefore, it does not have to be unnatural for *mo* to be used like this although it usually refers to saltwater seaweeds. This name could be seen as an example of the word used in a broader sense, and it seems that *mo* can refer to any plant living in both fresh and salt water.

4.1.57 kapana – river greens (?)

The etymology of this name seems to be *kapa* ‘river’ + *na* ‘greens’. It is one of the more uncertain plants, and could perhaps refer to various water-loving plants, and could be related to *kapa-mo*.

4.1.58 kaparapudi – *Gleditsia japonica*

The ZDB has this under the heading *saukepu*, and also mentions the probable reading *pudi no kwi*, 'wisteria tree'. The etymology of this plant name is most likely *kapara* 'river field', + *pudi 'wisteria'*. The form *sau kepu* is the reading of the characters 葛莢.

4.1.59 kapayanagwi – pussy willow

This plant also has the shortened form *kapayagwi*. The etymology of this plant is quite certain to be *kapa* 'river' + *yanagwi*, where in some cases *yanagwi* is further shortened to *yagwi*. The etymology of *yanagwi*/*yagwi* itself is more problematic (cf. *yanagwi*).

4.1.60 kape – Japanese nutmeg tree

ZDB notes that the form kaya is seen in the nihon shoki, and the GZS suggests that this is the basic form. It is somewhat difficult to account for the relationship between *kape* and *kaya*. Note that this is different from *kaya 'thatch grass'.*

4.1.61 kapobana

The ZDB believes that the attestation *kapo ga pana* refers to the same. *Kapo ga pana* is probably *kapo* 'face*' + ga 'GEN' + pana 'flower,* while kapbana most probably comes from *kapo* 'face' + *no* 'GEN' + *pana* 'flower', where *no* has been reduced, giving *bana.* The referent cannot be established with certainty,

4.1.62 kapyerude – maple

Most books seem to agree on that the etymology of this word is frog's hand, *kapyeru* 'frog' + *no 'GEN' + te* 'hand', undergoing the following change: kapyeru-no-te->kapyeruNte->kapyerude. In modern Japanese there has ben additional loss of *ru*, and regular simplification of /pye/ to /e/.

4.1.63 karamusi – ramie

The ZDB notes that this plant is also called *ma-wo*, *kara-wo* and *ke-musi* in later sources. Frellesvig notes that this is one of of the words that might be loanwords from Korean, and

writes the following: *karamusi 'ramie' (fabric, cloth), Chinese silk plant, MK mwosi 'ramie fabric, cloth'; cf. OJ kara- 'China, Korea, foreign' (Frellesvig 2010: 147)*. For a contrary view, GZS mentions that it is the nominal form *musi* from the verb *musu 'to steam',* because of the process of making fibre. The first theory is tempting, but it could be possible that the word musi appears some time before *karamusi,* and that it originally referred to some kind of native fibre plant, and that it was only when they came in contact with this new type of fibre plant that they needed to distinguish it as *karamusi* 'foreign *musi*'.

4.1.64 karana – pungent greens

This plant name is most probably the adjective stem *kara* 'spicy' + *na* 'vegetable', and according to ZDB it could refer to onion species. See *amana.*

4.1.65 karasi - mustard

GZS supports the theory that it might be from kara-si 'spicy; hot', but mentions that daigenkai suggests the etymology ke-rasi. Double check this one. The ZDB suggests that it might be the shuushikei of the adjective kara-si used as a noun.

4.1.66 karatati – trifoliate orange

GZS sees this as a simplification of *kara* 'foreign' + *tatibana* 'trifoliate orange'. However, there is no direct evidence that suggests that *tati* was never used on its own, which could mean that the etymology might be *kara + tati*, with the same glosses. Cf. *tatibana, yamatatibana*

4.1.67 kasi – evergreen oak

GZS notes that many theories are based on the adjective kata-si 'hard', because the tree is hard, but that he finds it difficult to account for the loss of ta. He suggests that the etymology is *ka* 'hard' + *si* 'material'. Although the English translation used here is 'evergreen oak', it seems likely that this word had a quite broad usage in O*J.* Cf. *sirakasi, kasipa.*

4.1.68 kasipa – (a type of) oak

GZS believes that it comes from kasi(i), the reduced form of the nominal form *kasigi* of the quadrigrade verb *kasigu* 'to cook grains' + *pa* 'leaf", because the leaves. The verb was *kasik-* in OJ, and it is not completely impossible. However, it might be more likely that the word *kasi* referred to various types of oaks in OJ, and that since *kasipa* had leaves that stood out, this term slowly started referring only to the tree on which these useful leaves grew.

4.1.69 kata – a type of vine

This word mostly occurs in compounds. ZDB defines it as *a type of kazura*, but the etymology is somewhat uncertain.

4.1.70 katakagwo – dogtooth violet

GZS believes that the etymology is *kata*, the mizenkei of the verb *katu* 'beat' + a form of *kaku* 'scratch', because the root is beaten to get starch.

4.1.71 katura

GZS notest that there are many theories, but says that he thinks that the *ka* has nothing to to do with *ka* 'fragrance', but rather that the tree is named after a place name. However, it is common for plants to give name to place names, but not so common for place names to give names to plants as the only element, not in addition to anything else. There are no other examples of this kind of construction in OJ, and so the etymology might lie elsewhere.

4.1.72 kaya

Also attsted as *kaye* in eOJ. GZS thinks that it comes from kari 'cut; harvest' + *ya* 'roof"., or kusaya->kaya. Both theories are based on it's used as thatching grass.

4.1.73 kemomo – peach

The most probable composition of this plant name is *ke* 'fur' + *momo* ' peach; plum' . Note that the word 'ke' food, has the same kō-otsu status as the *ke* in *kemomo*, but *ke* 'fur' is a more likely candidate. Cf. *peach*

4.1.74 ki – onion

ZDB has *ki* unmarked. It suggests that modern Japanese is ne-(no-)ki. Ryukyuan material from the Shodon dialect of Amami strengthens the theory that it is in fact *kwi* (Martin 1987: 53), which also makes it more probable that *nagwi* might also have ‘onion’.

4.1.75 kiku – chrysanthemum

The ZDB notes that this word is based on the Chinese reading of the character 菊 ’chrysanthemum’, which has the middle Chinese reading **kuk*.

4.1.76 kimi – millet

GZS sites that daigenkai and says that it comes from *kwi* ‘yellow + *mi* ‘fruit, seed’. Ainu kas *kimbi*, but this is probably from Japanese, as development from OJ kimi to *kibi* can be explained by m-b variation, and if this was phonetically something like [kĩ^{m}bi], then it is more probable that Ainu *kimbi* is based on this. This is different from words like *konbu*, which the GZS recognizes as a loanword from Ainu, as there is no form *komu*.

4.1.77 kiri – empress tree

GZS says that the main theory is that it comes from the verb ”kiru”, because it grows back as soon as it is cut. The status of *ki* is uncertain. ‘cut’ has ki1ru.

4.1.78 kisa (no kwi) - uncertain

The phonological status of this plant is uncertain. It is not mentioned in any of my etymological sources. I think? The *ki* is unmarked in ZDB.

4.1.79 koke - moss

The easiest, and perhaps the best theory is that this plant comes from ko ’tree’ + ke ’ fur’. GZS agrees with this theory. *Ko* is the bound for of the noun *kwi* ’tree’.

4.1.80 kokoroputwo – a type of seaweed

Perhaps *kokoro* refers to the base of the plant, so that it is *kokoro* 'heart' + *putwo* 'thick'. This analyzis is easy and tempting, but there could be more. Especially the motivation is difficult to confirm.

4.1.81 kome – uncooked rice

GZS writes that he thinks the word comes from the verb *komu* 'to brew', and ultimately from Korean. He also lists several other theories, that say that it comes from the verb "komeru", 'to load', or that it is a loan from either vietnamese or tamil.[...]. Because of the many etymological theories, I will leave this word for now.

4.1.82 komo – water oats

GZS suggests that the origin of this plant name is the same as for *kama*, namely that it comes from *kumi 'putting together'*, from the verb kumu. However, as with *kama* I find this theory a bit difficult because of the vowel changes. Cf. *kama.*

4.1.83 kwomo – a type of seaweed

No sources discuss this plant name, but I suggest that it simply comes from *kwo* 'small' + *mo* 'seaweed'.

4.1.84 konara – Japanese oak

The phonologic status *of ko* is not completely certain. This word is attested in poems from eOJ, and the ZDB writes that there are no known examples where written *kwo* is used to represent *ko*, but that there are two-three cases where ko is used to represent kwo. Therefore, this word might very well be *kwonara*, in which case GZS agrees on small *nara*, in opposition to *oponara* 'big-oak'. ZDB suggests that it could be *ko* 'tree (compound form)' + *nara* in case ko really is *ko*.

4.1.85 kwonotekasipa – oriental thuja

The ZDB mentions that it could be NJ *konotekasiwa*, which has leaves that fit the etymology, but two other theories which are mentioned are that it is either a type of *papaswo*, or a type of

horse chestnut. There is no mention of horse chestnuts in Both oak and thuja have leaves that resemble childrens' hands. ZDB writes that the etymology it got its name from the leaves which look like childrens' hands, and this is supported by contextual data from the poems. The etymology is then *kwo* 'child + *no*'GEN' *te* 'hand' + *kasipa* 'oak'.

4.1.86 kukumira – a type of chives

This plant is believed to be kuku 'stalk' + *mira* 'chives'. *kuku* is the bound form of the word *kukwi*, which is also found in modern Japanese as *kuki* 'stalk'.

4.1.87 kukutati – *Brassicaceae* sp.

This plant name is believed to be kuku 'stem' +tati 'stand'. The *kuku* found here is the same as in *kukumira*. The referent is somewhat uncertain, but the ZDB notes that in any case it is a plant in the Brassicaceae.

4.1.88 kunugi – (a type of) oak

The phonologic status of *gi* is uncertain according to the ZDB. GZS believes that the theory with most credibility is that it comes from *kuni* 'country' + *kwi* 'tree'.However, he also says that two other theories cannot be discarded completely, namely a theory that says that it comes from *ku* 'firewood' *no* 'GEN + *kwi* 'tree', or the theory that saus that it is *ku* 'eat' + *no* 'GEN' + *ki* 'tree. However, the first of the two is strange because of the vowel, and the fact that it is more likely to become *kugwi than change vowel*.The second one is strange because the genitive particle is not used with verbs before nouns, and eat is *kup*-.Because of representation 歴木, it is possible that *gi* is in fact *gwi*. There are other words where *kuni* us *kunu*, as in *kunuka*, which is analyzed by ZDB as *kunu* 'country'+ *ka* 'place'.

4.1.89 kupa –mulberry

GZS notes several theories that all note its connection with the verb *kup*- 'eat', because it is used as food for silk larva. The connection between the silk worm and the mulberry tree is also seen in the word *kupa-kwo* 'silk worm', lit 'mulberry child'.

4.1.90 kurenawi - safflower

ZDb writes that this plant was imported from Kure (呉 'China') and that it is an abbreviation of *kure* 'China' + no 'GEN' + *awi* 'indigo'. Awi was one of the dye plants of that time,

4.1.91 kuri

GZS says that among the etymologies suggested in the NKD, the most probable is the one from the Daigenkai suggesting that it is from *kuri* 'black', possible related to both *kura* 'dark' and *kuro* 'black'. He writes that is because the burrs turn dark after they fall to the ground. However, note that kuri has the compound form *kuru*, which suggests that the original form is *kuru(C)*. Cf. *kusi*

4.1.92 kusi - chestnut

This word is believed to be a dialectal variety of *kuri* 'chestnut', but I have not been able to find any explanation of the /r/-/s/ variation found here. This kind of variation is not found among any other plant names in OJ. There is also an Ainu word, *kush*, 'burr', as in *yam kush* 'chestnut burrs' (Batchelor 1905). Perhaps this word is related to this?

4.1.93 kusokadura

Believed to be *kuso* 'feces' + *kadura* 'vine'. GZS mentions that both the leaves and the vine itself gives of a fould odour when rubbed.

4.1.94 kusu – camphor tree

GZS says that among the several theories found in the NKD, the most probable one is that it comes from either *kusushiki* 'strange; mystical' + *ki* 'tree' or *kusuri* 'medicine' *no* 'GEN' *kwi* 'tree', based on the uses of camphor. GZS says that *kusuri* and *kususi* are related.

4.1.95 kuzu – Japanese arrowroot

GZS says that it could be related to kadura, and that in some dialects there are words for sinews (NJ *tuji*, dialectal variaton: *kaji/kiji*) that are similar, and that this is the reason behind it. The evidence is somewhat scarce, but I have not been able to find any better theory.

4.1.96 kwonagwi – *Monochoria korsakowii*

The etymology of this word is most likely *kwo* ‘small’ + *nagwi ‘Monochoria korsakowii’.It*

4.1.97 makwi - *Podocarpaceae* sp.

ZDB notes that it is believed that the first meaning ‘great tree’, believed to refer to trees such as sugi and hinoki because they are good buidling materials, and then later it became *Podocarpaceae* sp.

4.1.98 mame – bean

GZS writes that mame comes from *ma* ’round’ and *me* ’sprout because of the shape, but there is no word *ma* ‘round’ in OJ. The only close words are *maro* ‘round’, and the quadrigrade verb *mag- ‘turn’.*

4.1.99 masakinokadura – oleander

ZDB also has the entry masakidura, which it treats as a variant of *masakinokadura*. It also notes that it is also simply called *masaki*.etymology?(masaki+dura) Is said to also be called just ”masaki”. GZS on “masaki”, first he writes that it has the meaning 正, but then he writes that it comes from a contraction of *massao no ki* ‘ really green tree’, because of the colour of the leaves.

4.1.100 matu – pine

GZS says that the etymology is either the verb *matu* ‘wait’ or the verb *‘worship’*, from ‘kami wo matu’, waiting for the gods, relating to the tree’s connection to old age because it is an evergreen tree.

4.1.101 mayumi – *Euonymus hamiltonianus*

GZS concludes that it comes from true bow. It could perhaps be that the name was originally *yumi*, which became the name of the weapon, but when the term for bow became established, it became necessary to distinguish between the two types of *yumi*, thus creating *ma* ’true’ + yumi ‘yumi tree’. See also *kadi*, which is also a name for a tool and a tree.

4.1.102 me – seaweed

The word *me* ‘sprout’, also has the bound form *mo*, as in mo-yasi ‘bean sprouts’. Because of the word *mo* ‘seaweed’, it is tempting to say that *me* ‘sprout’ and *me* ‘seaweed’ have a common origin. However, bound forms cannot normally occur by themselves, and since mo frequently is used on its own, or as the second member of a compound, it makes it somewhat uncertain. GZS supports the theory that *me* ‘seaweed’ is related to *me* ‘sprout’, but believes that *mo* ‘seaweed’ comes from the reading of the character 茂‘grow thick; dense’, because of the dense growth of seaweed. However, accepting a loanword which does not actually refer to the plant in question, on a high taxonomic level, for a plant which is not imported, does not sound so probable when looking at the scarcity of Chinese loanwords elsewhere in the corpus. Note though that the ZDB has the adjective *mo-si* ’dense (of growth)’, which might be related.

4.1.103 mega – Japanese ginger

GZS mentions two theories: one that says that mega comes from *me* + *ga* ‘fragrance’ because the young shoots are very fragrant. He also mentions another theory where ginger is called *se* ‘older brother + ga’fragrance’, and *mega* being *me* ‘little sister’ + ‘fragrance’, but he concludes that the first theory is more fitting. He does not mention the nasal element, but it is could have been something like *me* + *no* ‘GEN’ + *ka* =>meNka =>mega.

4.1.104 midutade – water pepper

This plant name is probably *midu* ‘water’ + *tade* ‘knotweed’. The motivation behind the name is probably its place of growth, as it grows in shallow ponds, etc. Cf. *tade*

4.1.105 mira – chives

GZS writes that mira is an abbreviation of *kamira*, which he says comes from *ka* ‘fragrant’ + **me** ‘sprout’ + *pira* ‘flat; level’. It is possible that *kamira* is *ka*+*mira*, because of the word *kukumira* ‘a type of chives’, which then has to be *kuku*+*kamira*. If mira indeed is from kamira, it means that these two would have had to split, since they were used at the same time. Cf. *kamira, kukumira.*

4.1.106 miru – green sea fingers

This plant is not mentioned in my etymological dictionaries. It has both a logographic and phonographic attestation. The logographic attestation is 海松 'sea pine', but I have not been able to find any lexemes in OJ related to these two meanings, which might give the result miru. In Okinawan, this seaweed is called *biiru*, and there is also a similar word, called *biira*, which means 'weakling' (NJ *yowamushi*) (Kokuritsu Kokugo Kenkyûjo 1963). Perhaps there is a connection.

4.1.107 mitunokasipa – Dendropax sp. (?)

ZDB mentions that it also has the form *mitunakasipa*. ZDB defines it as 'a large tree, whose leaves' tips split into three', and write that it is possibly *mi* 'three' + *tuno* 'horn' + *kasipa* 'oak'. Its referent is debated, and the ZDB mentions that it could be either *Asplenium antiquum* Makino, or *dendropanax sp*, but only the latter has leaves that split into three, which fits the motivation.

4.1.108 miyatukogwi – red elderberry

This plant is not mentioned in my etymological dictionaries, but I assume it to be constructed as *miyatuko* 'capital' + *no* 'GEN' + *kwi* 'tree', with subsequent prenazalisation of /k/ following the reduction of *no*. The motivation behind the name is uncertain.

4.1.109 moduku – a type of seaweed

The GZS writes that the most probable etymology is *mo* 'seaweed' + *tuku* 'attach'. However, in order to explain /d/, one could assume that there is a reduced nasal, perhaps the dative-locative particle *ni*.

4.1.110 momo - peach

This plant name has 12 different etymological theories in NKD, which indicates the difficulties in finding its etymology. GZS says that it comes from *mo* 'fruit', repeated because there are many fruits on one three. He notes that this could also have to do with *momo* 'hundred'.

4.1.111 momoyogusa – uncertain

ZDB mentions that there are several theories about the referent, but lists it as uncertain. The word is used as a pillow word, together with momo-yo ‘hundred ages’, but that does not mean that the etymology is related, and all in all it is uncertain. The structure is probably *momo(-)yo* + *no* ‘GEN’+ kusa ‘leafy herb; grass’, regardless of what the meaning of *momoyo* is.

4.1.112 momunire – a type of elm (?)

The structure of this word is probably *momu* + *nire* ‘elm’, but the exact referent and the status of momu is somewhat uncertain. The word *momu* ‘rub (with one’s fingers)’ can be found in the ZDB, but if this really is the correct etymology is uncertain.

4.1.113 mugi – barley

GZS says that it comes from *mu* ‘body’ *nogi* ‘awn’, citing the book, but he does not mention the motivation. Phonologically it is a viable explanation. Dialectal data from Shodon, Amami says that it should be mugi(Martin 1987: 53), but *nogi* is unmarked in ZDB, so it is difficult to confirm or dismiss the *mu+nogi*-theory.

4.1.114 mugura – viny weed (?)

KZS says that the kugura might refer to NJ kanamugura or yaemugura, and that it probably referred widely to viny weeds. GZS writes that the etymology is probably *moku* ‘densely (growing) + ra ‘suffix’, with *moku* coming from the adjective *mo-si* ‘dense (of growth)’. However, it is not common to find the adverbial form of adjectives being used in word formation, and there is no explanation of what function the suffix has.

4.1.115 muku – Aphananthe aspera

ZDB notes that it is possible that this had the free form *mukwi*. The only place attested in ZDB where this word is used on its own is a logographic attestation, and it could be that this should have been read mukwi. GZS writes that among the possible theories, the most likely one is that it comes from the verb *muku* ‘peel’, because the bark peels off as the tree ages. But there is no verb *muk-* ‘peel’ attested in the ZDB.

4.1.116 murasaki – gromwell

It seems like GZS agrees with several theories that say that *murasaki* come from *mura* ‘group’ + *saki* ‘flowering, from the verb *saku* ’to bloom’. He also mentions that it could come from Korean, but the first theory is more probable. He says it is because the plant’s flowers are in groups.

4.1.117 murwo – temple juniper

Most theories in the NKD believe that it is either related to *murwo* ‘room’, or to the lower bigrade verb *mure-* ‘gather’. *Murwo* is a tempting candidate because it is phonologically very close, but it is difficult to dismiss *mur-*.

4.1.118 na – greens

Although this word is defined in the ZDB as ’greens; fish; sidedish’, it is commonly used as the second element in plant names referring to edible greens, where it seems to have lost this ambiguity. It is also in found many words that are attested in later periods.

4.1.119 nadesikwo – pink

GZS says that the only suitable theory is that it is *nade ‘patting’ si ‘particle’ + kwo ‘child’, little thing*. The verb *nadu* ‘pat’ is attested in OJ, but the problem is *si*.

4.1.120 nagwi – *Monochoria korsakowii*

In the KSZ it is written that it is because the leaves soften, but I am not sure what they soften. The phonological status of ‘onion’ is *kwi* and because of the logographic spelling 水葱 (’water onion’), it could be that the last element in this name is *onion*. However, the first element is more questionable. ZDB writes that in 水葱, 葱 is used as kungana, and that this does not necessarily have to mean ’onion’.

4.1.121 nanoriso – gulfweed

This seaweed is used as a word play together with the verb *noru* ‘say’, and can be taken as a pun on na-nori-so ‘don’t say it’. in the ZDB it is also attested as *nanorisomo.* It is difficult to

analyze the name as a seaweed, as even though it has *nori*, there are in addition two other lexemes to account for, and they are uncertain. *na* could be ‘vegetable.’

4.1.122 napanori – *Nemalion vermiculare (?)*

The etymology of this word is most likely *napa* ‘rope’+ *nori* ‘seaweed’. The NKD defines it as ‘long, ropelike seaweed’, which is probably the motivation behind the etymology. Cf. *nori.*

4.1.123 nara – Japanese oak

GZS writes that he thinks the word nara comes from the mizenkei of the quadrigrade verb *naru* ’bear fruit’, because of its fruits which are valued as food. This is possible using Martin’s explanation mentioned in chapter 2.

4.1.124 nasi – pear

GZS mentions that there are six theories in the NKD, but he thinks that only one of them should be considered, and he supplies his own theory as well. The first is that it comes from *na* ‘center’ *su* ‘vinegar’ no ‘GEN’ + *mi* ’berry’, because the core is more sour than the rest of the fruit. The second theory is that it might come from nasi ’not be present’, ultimately from tuma nasi ’no tip’ no kwi, because of the shape of the fruit, because the tip of the fruit curves inwards.

4.1.125 natume – jujube

GZS mentions three possible theories, based on dialectal data: That natsume is either *natu* ‘summer’ + *no* ’GEN’ + either *me* ‘sprout’, *ume* ‘plum’ or *mi* ‘berry; fruit’ . GZS favours the theory that it is natu+ume, which can be explained, as *natu* + *ume* in OJ would become *natume* by the vowel deletion rule, and so even if *ume* was a relatively newly borrowed word at that time, this theory makes sense, as long as plums get fruit before jujubes .KZS supports the first theory, and says it is because it sprouts late. Both theories have similar motivational backgrounds, and it is hard to choose either.

4.1.126 nebu – silk tree

GZS favours the theory that it comes from *neburi (no kwi)*, from *neburu 'sleep'.* He says that b is older than m in cases where b and m can alternate, and although this is not necessarily the case, cf. consonant alternations in chapter 2, the theory is still probable. He says it is because it looks like the leaves are sleeping when the close.

4.1.127 netukogusa – uncertain

Both the referent and the etymology of this plant name are somewhat uncertain. ZDB mentions that it is used together with *ne 'sleep', but the etymology is not necessarily related.*

4.1.128 nire - elm

GZS mentions two theories: either that it comes from 'nureru', being slippery because when the bark is removed it is slippery. Or, that it comes from Korean. In ZDB the quadrigrade verb nur- and the lower bigrade verb nure- '' are similar in meaning and they could all be connected. However, it would have to include irregular vowel changes, which are more difficult to explain.

4.1.129 no – bamboo for arrows

It is tempting to compare this word with *sinwo 'small, thin bamboo'*, but the phonological attestation is different. Some theories listed in NKD suggests that it is believed to be a reduction from *nori* 'counter for arrows', but ZDB suggests that *nori* is in fact *no* 'bamboo for arrows' + *iri* 'put in'. The etymology remains unclear.

4.1.130 nwobiru – wild leek

This plant is most likely nwo 'field' +no 'GEN' + *piru* ',perhaps referring to wild *piru*, as opposed to cultivated varieties.

4.1.131 nori – laver

In the ZDB, *nori* has the same phonological attestation as *nori* 'glue'. It is most likely that this type of seaweed, which sticks easily to things and does not have the same leafy or branched structure as some other seaweeds, has been called so because of its sticky qualities.

4.1.132 nubatama – leopard lily(?)

ZDB notes that the structure is most likely *nuba* + *tama* ‘sphere’. However, *nuba* is not attested anywhere else. It is however believed to mean ‘black’, referring to the black seeds of the leopard lily.

4.1.133 nunapa – water shield

GZS suggests that the etymology for this word is *nu* ‘marsh’ + napa ‘rope’. The plant grows in water, and so the motivation is probably that it looks a bit like rope, that is in a marsh(-like) environment.

4.1.134 nuride –Chinese sumak

GZS suggests that it comes from *nuru* ‘slippery’ + *midu* ‘water’ + *de* ‘come out’. He does not explain exactly how the shortening happens, but he suggests that *midu* was left out, giving only *nuru* + *de*. I suggest that de should instead be the full form *ide*, which is the nominal form of the lower bigrade verb *ide* ‘come out’, which then would explain the vowels, based on the vowel deletion rules. It could also be that nuru is related to nuru ‘paint’, which is attested in OJ. The motivation behind this etymology is that the tree produces a sap that can be used in painting.

4.1.135 ogo – *Gracilaria* sp.

GZS suggests that the name comes from *oo* ‘large’ + *kori* ‘stiffening’ + *nori*. *Kori* is the nominal form of the quadrigrade verb kor- ‘stiffen’, after its use as a gelling agent. *Nori* was probably a later addition, as it is called *ogonori* in NJ.

4.1.136 ominokwi – fir (?)

The ZDB says that it might refer to modern Japanese momi no ki, but it is not certain.If this is the case, the etymology is difficult to establish with certainty. Looking at the logographic representation, it looks like it is omi ‘court official??’ + no ’GEN’ + kwi’tree’, but this does not work if *omi* represents phonographically a reduced form.

4.1.137 omopigusa – forest ghost flower

The most probable etymology for this plant is *omopi* ‘thought’ + no ‘GEN’ + *kusa* ‘leafy plant’, where *no* has been reduced to give *gusa*. *Omopi* is the nominal form of the quadrigrade verb *omop-* ‘think’.

4.1.138 opone – white radish

The etymology of this plant name is *opo* ‘big’ + *ne* ‘root’, in reference to this plant’s large, white root. *Opo* is the root of the adjective *opo-si* ’big’.

4.1.139 opowi –great bulrush

Similar to *opone*, this plant name is *opo* ‘big’ + *wi* ‘common rush’. This is likely because of its size. There is no **kwowi* attested in the OJ corpus, but it could be possible that this plant stands in opposition to a plant such as either just *wi* or **kwowi* . Cf. *wi.*

4.1.140 pagwi – bushclower

This plant is mentioned very often. The ZDB says that 140 poems in the MYS have *pagwi*. Martin (1987: 52-53) notes that because of evidence from Ryukyuan, pagwi most likely come from proto-Japanese pagu-Ci, which excludes *kwi* ‘tree’ as a possible element. Cf. *upagwi.* GZS supports two similar theories, but both include *kwi* ‘tree’, and are unlikely.

4.1.141 pamayupu – crinum

This plant is *pama* ‘beach’ + *yupu* ‘paper mulberry string’. It would seem likely that it has been thought as a plant which looks like *yupu*, which grows on the beach. See also *yupunori*.

4.1.142 panezu – Lithocerasus sp. (?)

ZDB writes that it is a plant that blossoms with red flowers in the start of summer, but that otherwise little is known. The word can also refer to a type of red colour. ZDB suggests that it might refer to a species of Lithocerasus, but it is not certain. The etymology is uncertain.

4.1.143 papaka – bird cherry (?)

The referent of this plant is not certain, but the ZDB mentions that it might be bird cherry. It is not easy to say anything else about this plant.

4.1.144 papaswo –Japanese oak

The head entry in ZDB is unmarked when it comes to kō/otsu, but the compound *papaswoba*, defined in the ZDB as 'leafes of *papaswo*', is written *papaswo*.The ZDB mentions that there are some dialects that refer to both NJ *kunugi* and NJ *nara as hooso/houso*, so it is possible that it used to refer to more broadly to similar trees in the beech family. It is uncertain.

4.1.145 pari – alder

ZDB mentions that it is also possible to see pari as a variant of pagi, but concludes that it is most probable that it refers to NJ hannoki after all. Bushclower and alder do not share many common features. It is uncertain.

4.1.146 patisu – lotus

GZS writes that the etymology is *pati* 'bee' + *su* 'nest', because the seed cup resembles a bee hive. In NJ the word has been simplified to *hasu*.

4.1.147 pazi – Japanese wax tree

ZDB notes that the plant is also attested as panisi in the Wamyoushou, and although this is a later source, it does point towards the fact that *pazi* comes from *panisi*, which makes sense phonetically, and that the uncontracted form survived to some extent. GZS believes that it comes from *hani* 'red or yellow soil' and *sime*, the nominal form of the lower bigrade verb *sime- 'dye'*, because the tree was used as dyestuff.

4.1.148 pazikami – Japanese pepper?

ZDB notes that ginger was also called *pazikami*, and that there are cases where it is difficult to tell which one is which. Note that the Japanese wax tree (*pazi*) and Japanese pepper have some superficial similarities: they have similar leaf shape, and both have large amounts of

small berries growing in a similar fashion. The name might therefore be *pazi* ‘Japanese wax tree’ + *kami*, but the status of *kami* is uncertain.

4.1.149 panakatumi – uncertain

This plant is uncertain, and according to the ZDB it is not easy to tell what the referent is. It is written logographically as 花勝見 (’flower’, ’win’, ’see’), but this might or might not have anything to do with the real etymology.

4.1.150 pi – cypress

GZS says that the theory with the most impact is the one that says that *pi* is related to *pwi* ‘fire’, but since the kō-otsu are different, it is hard to believe. However, he does conclude that *pi* ‘sun’ seems more likely, since the tree does not catch fire easily, and ‘pi’ fits the phonological profile better.

4.1.151 pikage – club moss

The ZDB writes that the referent is the same as for kage, and it seems that this is just a variant. The etymology is likely *pi* ‘sun’ + *kage* ‘shadow’, and the motivation is, as with *kage*, most likely the growing place, out of the sun. Cf. *kage.*

4.1.152 pimi – uncertain

Only attested in old documents, and apart from the fact that it is used to make bows, its referent is uncertain, as is its etymology.

4.1.153 pipiragwi – false holly

GZS explains this as beeing from the verb *pipiragi* ‘hurting’ + kwi ‘tree’. *pipiragi* comes from the verb pipiragu ‘ache’, and this is said to be because of the spikes on the tree. This etymology suggests that the *gi* in *pipiragi* was lost.

4.1.154 piru – rocambole

GZS writes that it comes from the onomatopoeic word *pipira*, which indicates a pricking sensation in the mouth. Cf. *pipiragwi*

4.1.155 pisago - gourd

The phonology of *go* is uncertain. The ZDB also mentions that the word pisago was sometimes known as just *pisa*. *Go* could perhaps be *kwo* ‘child’, which is sometimes used in this way, albeit most commonly with animals and people. I suggest that this word should be treated as *pisa ‘gourd’* + *no ‘GEN’* + *kwo* ‘child’, but with some uncertainty.

4.1.156 pisagwi - catalpa

In the OCOJ it is attested as 久木 (‘long time’+‘tree’), in addition to several mixed attestations. Note that the leaves of the catalpa tree are somewhat reminiscent of the leaves of the gourd plant, and with some imagination the long pods might look like tiny gourds. By the lack of other theories, I propose that it might in fact be *pisa* ‘gourd’ + *no ’GEN’* +*kwi* ‘tree’.

4.1.157 pisi – water chestnut

ZDB notes that there could be a connection between this plant name and the later attested word *pisi* ‘fish spear’, whose tip is somewhat reminiscent of a water chestnut. It suggests that it might originally refer to something sharp, but otherwise the etymology is unclear.

4.1.158 piye – millet

GZD believes that this could be a lone from Korean *phi*. Note the word *pi* or *piye ‘seed’* in Ainu.

4.1.159 popogasipa - *Magnolia hypoleuca*

GZS mentions three theories: that it comes from Chinese 厚朴 or 包, or that it is related to the verb *popom*- ‘include’. However, the middle Chinese readings for 厚朴 and 包 are *ɦu *phɣɔk and *pɣɛu respectively, neither of which are likely to give popo- in OJ. Therefore, the third theory, which states that it is from the shape puffs up like cheeks (OJ *popo*) is more likely. The word *popomar*- in ZDB is believed to be a variation of *pupumar*-, and since *pupum*- is also attested, it is not impossible that there could have been a form *popom*- in OJ as well, making it *popom*- ‘swelling (of buds)’ + kasipa, where *mu* is reduced to /N/, it could also be just *popo* ‘cheek’ + *no* ‘GEN’ + *kasipa* ‘oak’, but the motivation would be the same.

4.1.160 posokwi – prickly ash

Not mentioned in GZS, and ZDB does not list any etymology. There are two words in the ZDB that could be the basis of this word, namely *poso* ‘thin’, which accurately matches the phonology of *posokwi*, and *poso* ‘navel; calyx’, which has some debate about its phonological status. The motivation is somewhat unclear.

4.1.161 poyo – (a type of) mistletoe

This plant is not mentioned in GZS. Martin reconstruts it as foyo <pod$^{a}/_{o}$. The only similar looking word in OJ is the lower quadrigrade verb poy- ‘to bark’, which do not seem a likely candidate. Note the NJ word *hoya* ‘sea squirt’; the sea squirt also attaches itself to surfaces, and perhaps it is the attaching nature of both organisms that lie behind these names.

4.1.162 pudi - wisteria

GZS believes that it comes from *pu* ‘thread’ + *uti* ‘hit’, because the plant is used in weaving and sowing. However, it is difficult to explain the prenazalisation with this theory.

4.1.163 pudibakama – *Gleditsia japonica*

GZS mentions several theories, but the only one he believes is true is that it is said that this is because the colour of the flowers is similar to that of *pudi ’wisteria’,* and that the shape of the petals is similar to that of a *hakama (OJ pakama) ‘skirt’, which then gives pudi ‘wisteria’ + no ‘GEN’ +pakama ‘skirt’*, with following reduction of *no.*

4.1.164 punori - Gloiopeltis furcata

GZS thinks that it might be from *fusi* because the way of growing might resemble bamboo joints. The word *pu* in the meaning of bamboo joint is attested in the ZDB, and looking at the other words with the shape *pu* , it seems like this is the most likely one. The structure of the word is therefore pu ’stem joint’ + nori ’edible seaweed’. The seaweed has no visible joints, but it does exhibit a branching way of growth.

4.1.165 sakakwi – holy evergreen trees

ZDB notes that in the beginning this term was used to refer to any tree used in shinto practices, and so it goes on to mention that it could refer to *matu* ‘pine’, *sugwi* ‘cypress’ and *kasi* ‘evergreen oak’[10], and there are other theories as well. ZDB believes that it was definately not limited to the word referred to by NJ sakaki.

4.1.166 sakikusa – uncertain

It is very uncertain what this plant refers to. It is used with the word sakiku (luck?) because it sounds the same, and with the word naka because it splits into three branches, as assumed from the spelling 三枝 ’three-branch’. The etymology of the word seems likely then, to be either saki ’luck’, or from saki ’tip’, but it cannot be from lower bigrade verb sake-, because it’s nominal form would be sake. The quadrigrade verb sak- would have a nominal form saki, but because this verb is transitive it would not be as natural.

4.1.167 sakura – cherry

GZS notes that there are many attempts to find the etymology of this plant name, but that only one seem to be correct, which is that sakura is saku ’to bloom’ + ra ’suffix’. The flowers were very important in OJ as well, and there are several instances of *sakura no pana* ‘cherry blossom’, in OCOJ.

4.1.168 sakurawo – (a type of) hemp (?)

This plant has the etymology *sakura* ’cherry’ + *wo* ’hemp’. The referent is somewhat uncertain, and it is not certain what the motivation behind this name is.

4.1.169 sanakadura – kadsura vine

GZS believes it comes from the fact that it has clusters of red berries, and that it comes from *sane* ’seed’. + kadura ’vine’. This probably refers to the many small berries tha plant has.

[10] Carr in his article on NJ sakaki, confirms that this has to do with evergreen trees.(Carr 1995)

4.1.170 sanwokata – a type of vine(?)

It is not certain what this plant refers to, but it is probably some kind of vine. The word *sanwo* ’narrow field’ is also attested in ZDB. It is difficult to establish a certain etymology when the plant name is so uncertain, but it could perhaps be from *sanwo* ’narrow field’ + kata ’vine’, where sanwo refers to the place of growth.

4.1.171 sasa – bamboo leaf

GZS believes that among the existing theories, the most probable one is that it is an abbreviation of sasatake ‘small bamboo’. Whether it is an abbreviation, or just the use of the bare adjectival root *sasa* ‘small’, the motivation is probably based on the much smaller size of this type of bamboo, compared to the real bamboo. Cf. *isasa, take*.

4.1.172 sasage –cowpea

GZS proposes two etymologies, one from the verb *sasageru* ‘hold up’, because the pod curves in a way that looks like it is supporting something. The other theory is that it comes from saya ’pod’ + sage, where *sage* is the nominal form of the lower bigrade verb *sage- ‘lower’.*

4.1.173 sasibu – *Vaccinium bracteatum*

I have not been able to find any etymological theory. The Daigenkai says that *sasibu* is an abbreviation of sasibunoki, but does not give any other information. Perhaps there could be some connection to *asibi,* had it not been for the vowel, the *s* could have been explained by the prefix *sa-* which is also found in variants such as *sayuri.*

4.1.174 sawi – golden-rayed lily

There is not much information about this. NKD writes that *sa* is a prefix, and that wi is a contraction of *yuri.* This *sa-* is presumably the same as the one seen with *yuri,* as on *sayuri*. In NJ it is *yamayuri* ‘mountain lily’. *Cf. yamayurikusa, yuri.*

4.1.175 seri – water cress

GZS notes that it could come from Ainu, or that Ainu can have borrowed it from Japanse. It is somewhat unclear.

4.1.176 si – sorrel

picture This plant is attested logographically with a compound logograph 羊蹄

, which is not so common. This compound refers to a sorrel. The word is difficult to find an etymology for, but notice the word *sida 'fern', written* 羊歯 in later attestation, which both have *si*, and both have the character 羊 in the logographic representation.

4.1.177 sidakusa – *Lepisorus thunbergiana*

The structure is probably *sida* 'fern' + *kusa* 'leafy plant', but note that *sida* is not actually attested in OJ apart from in this compound. This is an interesting compound, because when first looking at *sida* it looks like it refers to several types of ferns and plants that typically fit into the category of *kusa*, but perhaps this word is proof of the fact that some ferns were considered under *kusa*, and that there was no category 'ferns'.

4.1.178 sidariyanagwi – a type of willow

A type of willow. The etymology is *sidari* 'hanging' and *yanagwi* 'willow'.

4.1.179 sidusuge – (a type of) sedge

The lower bigradeverb *side* exists. It is transitive, but it says that most cases where this is used, it is used in the sense of hanging strings etc. for prayers, and this fits well with the fact that *suge* is believed to have been used in ritual practices. The ZDB notes that it is not clear what type of *suge* it refers to, and that there are various etymologies, including it being *'below',* which comes from *simo* 'below'+ *tu* 'GEN', because of the way it grows below the water, or that it is related to *situ*, a type of Japanese waving. The second theory is difficult to confirm because of the nasal element in *sidu.*

4.1.180 sikimi – Japanese star anise

GZS believes that it could come from the verb *siku 'to occur repeatedly',* based on the fruits, which come in clusters. It would then be the nominal form *siki* + *mi* 'berry, fruit'.

4.1.181 sinwo – a type of bamboo

ZDB writes that it is a common name for small thin bamboo, but the etymology is uncertain.

4.1.182 sipi – pasania

GZS looks at various theories, but concludes that it is related to sip, but that it could have been influenced by the reading of the character 椎、but based on data on the pronunciation on this character[11], it is not likely that this is true.

4.1.183 sirakasi – white oak

This plant name is only attested logographically, and the etymology is most likely as the characters used suggest: *sira* 'white' *kasi* 'evergreen oak'. Cf. *sirasuge.*

4.1.184 sirasuge – white sedge

This plant name is most likely *sira* 'white' + *suge* 'sedge'. Allthough the most common form of 'white' is *siro*, the form *sira* is found in several compounds. Cf. *sirakasi*

4.1.185 soba – *Euonymus alatus*

The etymology of this plant is not certain. It does not refer to NJ *soba.*

4.1.186 sworasi – *Ligusticum* sp.

The ZDB says that parts of the plant looks like straw, but it is quite green, and it could be that the etymology is *swo* 'hemp' + *-rasi* 'like', but it is uncertain.

4.1.187 sugamo – a type of seaweed

[11] The character has the Middle Chinese reading *ɖi (From TLS[Accessed 04.11.2014])

The etymology is most likely *suga* ‘sedge’ + mo’seaweed’. Suge has the compound form *suga-*. *Sugamo* as found in the Izumo fudoki is also identified as ’reed seaweed’. Perhaps the motivation behind this name is that it bears resemblance to sedges.

4.1.188 suge – sedge

GZS supports one theory that says that *suge/suga* comes from its use as a purification tool, and that it is related to *suga*, as in NJ *sugasugashi-i* ‘refreshing’. Having free-compound variation, it it fully possible that the original name had *–a.*

4.1.189 sugwi – cedar

GZS Martin (1987: 52-53) notes that because of evidence from Ryukyuan, sugwi most likely come from proto-Japanese sugu-Ci, which excludes *kwi* ‘tree’ as a possible element. Since this means that the underlying vowel should be *u,* it could possibly come from *sugu* ‘straight’, as the tree is in fact often quite straight.

4.1.190 sumire –violet

GZS believes that this plant name comes from *sumi* ‘ink’ + *ire* ‘enter’ because the shape of the flower looks like an inkpot. Cf. *tubosumire.*

4.1.191 sumomo – plum

The etymology of this word is most likely *su* ‘vinegar’ + *momo* ‘peach’. Probably named so because of their sour taste. Cf. *momo, kemomo.*

4.1.192 susuki – pampas grass

GZS says that it is called susuki because it makes the sound ”sayasaya” in the wind, and that the ki means ‘offering of a specific length’, and that susuki is a common word for all tall grasses in the OJ period. This last bit might be true, but I have trouble understanding how sayasaya becomes susu.

4.1.193 susupori – vegetables for pickling

ZDB defines these as either vegetables used for pickling, perhaps some kind of leafy greens. It could also refer to the already pickled vegetables, and it seems like this word is more on the level of *na* 'edible greens', than a specific plant name, however, it is listed along with eggplant pickles in an old document, attested in ZDB, and since it would be strange to write 'eggplant pickles, pickles [...]' in a list, it must refer to at least a more specific type of pickles. The etymology is somewhat unclear.

4.1.194 suwetumupana – safflower

This plant is the same as kurenai, and could perhaps be a more spontaneous way of naming the flower. The etymology is *suwe* 'tip' *tumu*' pick' *pana*'flower', referring to the way in which the tips of the safflower plant are picked, all these words are attested individually in OJ.

4.1.195 swo - hemp

GZS writes that this is the second element in the word asa. See *asa*. This word is short, and it is difficult to establish an etymology.

4.1.196 tade – knotweed

The daigenkai notes under *tade* that it comes from the verb *tadareru* 'get infected', because this edible plant tastes spicy, but this verb is not attested in OJ. Other suggested theories from the NKD do not seem to be any closer to a theory that fits.

4.1.197 tadipi – Japanese knotweed

Its etymology is not mentioned in ZDB or GZS. The ZDB writes that it is the same as *itadori*, and since both are related to *tade 'kntoweed'*, it could very well be that the first element here is in fact *tade*.

4.1.198 take – bamboo

GZS cites the NKD and writes that it probable comes from a historical base from Korean (tai) or Chinese chiku(find middle Chinese pronunciation), based on Japanese *take* 'height' or taka 'high'. *Take* has the compound form *taka*. GZS also lists 7 other theories, and it is clear that

this is a very difficult word. The presence of a compound form suggests that it is a quite old word, and that *taka* was the original form. Several of the theories in NKD suggest a connection to the adjective *taka-si* ‘tall’.

4.1.199 take – mushroom

The actual phonological status of *ke* is not known. ZDB mentions that wild meat was named *take* because of a naming taboo. Two words have the phonological form *take* in OJ: *take* ’peak’, and *take* ’height; length’. I feel like this strongly suggests that all these words are related, perhaps also with *take* ‘bamboo’. Cf. *take* ‘bamboo’.

4.1.200 taku – paper mulberry

ZDB also mentions tape. Otherwise no etymology is suggested.

4.1.201 tapamidura – uncertain

The etymology is most likely *tapami* + *no* ‘GEN’ + tura, with following reduction of *no.* However, there is no obvious candidate for tapami, making the etymology uncertain.

4.1.202 tara – aralia (?)

GZS mentions several theories, but in the end does not conclude anything. The referent is somewhat unclear – it is not certain that it refers to the same as NJ *taranoki* ‘aralia’.

4.1.203 tatibana – citrus

The word ”tati” can also be found in the word karatati ‘trifoliate orange’. The etymology is uncertain.

4.1.204 tigaya – Japanese bloodgrass thatch

This plant is known as chigaya in modern Japanese, but as *kaya* in OJ did not indicate any species of plant, the etymology is ti ’Japanese bloodgrass’ + *no* ’GEN’ + *kaya* ’ thatching grass’, and it is more likely that the literal meaning of the word at that time followed this

analysis, rather than being a specific type of *ti*, in which case we would expect a form like *kayati/kayadi.

4.1.205 tisa – styrax (?)

The ZDB proposes several referents for this plant name, among them ‘lettuce’ and ‘styrax’. According to GZS, tisa comes from *ti* ‘milk’ + *kusa* ‘plant’, but this etymology is strengthened only if the plant has a white plant sap, which favour it being analyzed as lettuce, not as styrax. However, as *yamadisa* is also believed to be’styrax’, it would be unnatural for *tisa* to be lettuce, as these plants are very different.

4.1.206 titinomi - uncertain

Although the word milk is not attested as *titi* in OJ, only as *ti*, ZDB theorizes that just like *papa* ‘mother’ could be a dublicated form of *pa*, and *titi* ‘father’ from *ti*, it is not unlikely that the form *titi* ‘milk’ existed in OJ as well. It is believed that the milk-reference comes from milky sap, but no strong theory has been fronted. This makes the structure *titi ‘milk’* + *no* + *mi ‘berry’*

4.1.207 tokizikino kaguno konomi – citrus(tatibana)

This word – or rather-, phrase, is believed to refer to the plant known as *tatibana* in OJ. This kind of plant name, which when translated means ’unceasingly fragrant fruit’, can be compared to *suwetumupana* and perhaps *akinoka*¸which all seem to not be the fixed name of any plant, but rather more poetic ways of referring to them.

4.1.208 tokorodura – (a type of) yam vine

The structure of this name is probably tokoro + no + tura, but the exact status of tokoro is uncertain. The phonological status is the same as that of tokoro ’place’. In NJ the vine is also known simply as *tokoro* , which could indicate either that it was abbreviated in NJ, or that *tokoro* in OJ already some times got a lexical extension.

4.1.209 tubaki – camellia

GZS first discusses the theory of an internally reconstructed name, where he says that the word *tunipaki* is the most probable, either meaning harbour garden tree, or garden tree. Phonetically this form makes sense, but I am having more trouble with the analysis.

He also mentions that the name could come from Korean *tom baik*. *Tom baik* is actually the Korean reading of the characters 冬柏. He conludes that one could see this word as a Japanification of the Korean word, which is then reanalyzed as *tunipaki*. Looking at the early and late middle Chinese pronunciations of 冬 *and* 柏 and find examples of their use or the use of characters with identical middle Chinese pronunciations, one finds that the on-reading of this compound would be something like *to-peki*. On top of this, the word tubaki is quite common in the OCOJ, but the logographic spelling 冬柏 is not found, indicating low exposure.

4.1.210 tudura – Menispermaceae sp.

ZDB writes that it is believed to be a common term, rather than pointing to one specific plant. There is an adjective, *tuduraka* 'surprised', but I believe it is better to see *tudura* as tuN-tura, with *tuN*- being uncertain

4.1.211 tuganoki – Japanese hemlock

GZS says that it is difficult to tell which one of the varieties *tuga* and *toga* that are the oldest, but he believes that toga is the oldest because it is also found in placenames. He then says that it could be from the verb *togaru* 'to be sharp'. The form *twoga* is also found phonographically in the MYS.

4.1.212 tuge – box tree

GZS lists three theories, but concludes that it is probably right that it comes from *tugu*" 'to follow', because its leaves become yellow following the raining season.

4.1.213 tukwikusa – dayflower

GZS says that *tukikusa* is *tukikusa* from the quadrigrade verb *tuku* ’place’ + *kusa* ‘leafyplant because it is placed on fabric in order to dye it. The logographic representation 月草 ’moon-grass’, but would then have to be a folk etymology.

4.1.214 tukwi - zelkova

GZS mentions that the etymology might be *tu* ‘harbour’ + *kwi* ‘tree’. Otherwise uncertain.

4.1.215 tumama – Machilus sp. (?)

ZDB mentions that there are several theories, but that among them, the most probable one is that it refers to NJ tabunoki ’Machilus thunbergii’. Looking at the form of the verb, it could be from the verb tumam-, but this verb is not attested in OJ.

4.1.216 tumi – paper mulberry

The kō-otsu is not mentioned in ZDB. There are four possible etymology candidates in OJ: *tumi* ’sin’, or one of the three verbs *tumu* ’pick’(quadrigrade), *tumu* ’pile up; save(money)(quadrigrade, transitive) or *tume* ’gather’(lower bigrade, transitive), but none of these make obvious candidates.

4.1.217 tunomata

The etymology is probably *tuno* ‘horn’ + *mata* ‘fork’, relating to this seaweed’s forked appearance.. The same characters that are used to write *tunomata* are also sometimes read as punori. Cf. *punori*.

4.1.218 tupa – Japanese silverleaf

The entry in GZS is based on the modern Japanese name *tuwabuki*, which GZS says that the best theory of the ones found in NKD is that it comes from *tuya* ‘glossy’ + *pa* ‘leaf’. This would lead to reduction of the *ya*, *tuyapa-=>tupa.*

4.1.219 tuposumire – (a kind of) violet

ZDB mentions that this word is said to be called so because the flower of this type of violet looks like a *tubo* 'pot'. As *sumire* itself is believed to have a slightly similar etymology based on the shape of the flower, perhaps this name was created after *sumire* was lexicalized so much that the etymology was not as clear. Cf. *sumire.*

4.1.220 tura – vine

GZS says that it is related to the verb *turanaru, turanuru* 'stretch'. The word *tuna* 'rope' in OJ can, according to the ZDB, also mean 'a viny plant'.Although there is some n-r variation between eOJ and wOJ, the examples of tuna are all in wOJ. It could be that it is based on an – a form of the verb *tur- 'connect'.*

4.1.221 turapami – a kind of oak

GZS thinks that it comes from tuburami, where bu and ra have been interchanged, and with vowel change.

4.1.222 tusimo – a type of seaweed

ZDB only writes that it is a type of edible seaweed, but that it is unclear. I have not been able to find any satisfying explanation.

4.1.223 tusudama –job's tears

GZS suggests that it might come from the reading of 数珠 , because it is used to make rosaries.

4.1.224 tuta – creeper

GZS sites that Daigenkai and believes that the word comes from the verb tutap, because it is easier for the p to drop. There is some uncertainty around this, but it is not a bad explanation. He says that it could also be related to the word *tuna* 'rope'

4.1.225 tutipari – uncertain

GZS writes that *pari* in this case is the same as *pagwi*, just like *yamabuki* also has the form *yamaburi*. I find this a bit hard to believe, as he does not cite any reference for this claim, and there is no phonographically attested *yamaburi* in the OCOJ. Without any other examples, could it be that the word *yamaburi* is reanalyzed on basis of its written form, and not because of sound change? Personally I am in favour of a more literal analysis of *tuti* 'soil + pari 'needle'. The Daigenkai also suggests that the pari here is the same as in the tree name *pari*. Cf. *pari*

4.1.226 tutuzi - azalea

GZS notes that it might have come from Korean, but it does not fit very well. There are other attempts.

4.1.227 ubara – briar

GZS writes that he believes it comes from *i* 'prefix' + *pari* 'needle', but does not explain the vowel change in *pari*, nor the function of the prefix *i-*. Martin(Martin 1987: 31) cites Arisaka listing *ubara* among words which changed from m to b during the heian period. It would then mean that *umara* indeed is the oldest form of the two words, but as seen in the theory part, this direction of change is by no means universal. Nonetheless, it is very possible that thorns are the motivation behind this name.

4.1.228 ukyera – *Atractylodes japonica*

The form ukyera is only attested in eOJ, and ZDB mentions that the form wokera also exists. The etymology is uncertain.

4.1.229 ukinunapa – water shield

This plant imost likely *uki* 'floating'+ *nunapa* 'water shield'. The referent is believed to be the same as for *nunapa.*Cf. *nunapa.*

4.1.230 ume - apricot

Frellesvigwrites that this word is generally believed to be a loan from Chinese, based on the reading of the character 梅, which has the Old Chinese reading *hmay. (Frellesvig 2010: 148)

4.1.231 umo – taro, potato

It seems like GZS believes that the word has a base in the languages of South Asia, with an added meaning of something delicious (*uma)*- which is burried (*ume)*, however it is difficult to confirm. Ainu has *emo*, which could be a loan from Japanese before non-final **e* was raised to *i*, but it could also have gone the other way.(Cf. Frellesvig 2010: 47)

4.1.232 unopana – deutzia (?)

ZDB writes that there are many theories around the orgin of the name *unopana*, but that it is unclear. The mixed attestation 于花, where 于 is phonographic, *u* 花 is logographic, 'flower' supports the view that it is *u* + *no 'GEN'* + *pana* 'flower', but the status of *u* is uncertain.

4.1.233 upagwi – *Aster yomena*

GZS suggests that it comes from *ubu* 'grow' + pagwi ''. The logographic attestation of upagwi suggests that it has tsomething to do with *pagwi*. *U* is written with the character for 'rabbit', which is read u, but the supposed word *u* 'rabbit' is not attested in the ZDB. Cf. pagwi

4.1.234 uragupa – a type of mulberry

The etymology of this plant is most likely *ura* 'tip' + *no* 'GEN' + *kupa* 'mulberry', with *no* reduced. The NKD defines this word as 'tips of mulberry branches', and thus sees it not as a separate species, but a part of the mulberry tree. It might be a logical explanation, but it would be more natural to expect kuwa-ura for this meaning. Cf. *kupa.*

4.1.235 uri – melon

Frellesvig note that this is one of several words that might be loanwords, or possibly cognates, from Korean. He notes: *uri* 'melon', MK [middle Korean] *¨woy* 'cucumber', pK [proto-Korean] *wo˙li. (Frellesvig 2010: 147) The ZDB mentions that several types of *uri* are mentioned in the Engishiki, but these are not treated here.

4.1.236 wakame – *Undaria pinnatifida*

The etymology of this plant is most likely *waka* ‘young’ + *me* ‘seaweed’, referring to its softness and edibility. Cf. *me.*

4.1.237 warabi - bracken

NKD lists several etymological theories. GZS believes that because the stem curles up when the plant is young before it unfolds, it comes from *wa* ‘circle’ *ra* ‘suffix’ + *pi* ‘ears protrude’, but he does not explain the function of the suffix ‘ra’, and *pi* should be *pid-*.

4.1.238 wasuregusa – daylily

The most probable etymology is the nominal form *wasure* from the verb wasure- ’forget’ + gusa(<kusa) ’herb, weed’. This plant is used several times in the OCOJ corpus, where people who want to forget people they love. There is also a word, *kwopwiwasuregusa* ’love-forgetting plant’. One problem here is that it is difficult to reconstruct a nasal initial particle. However, there are two other possibilities: It could be from *wasureru kusa*, with a reduction of *ru*, or looking at how transparent this compound is, it could have been coined after sequential voicing became a part of the morphophonemic part of the language.

4.1.239 wegu – water cress (?)

There is some dispute as to whether this plant refers to water cress (NJ *seri*) or arrowhead (NJ *kuroguwai).* ZDB writes *arrowhead,* but Hosomi argues against this theory, as exemplified earlier. However, accepting *wegu* as ‘water cress’ creates two problems: how did the meaning of *wegu* change to mean arrowhead in NJ, as it does in some dialects according to the ZDB, and what was the difference between seri and wegu in OJ. One can wonder why the author wanted to use a different word for a word that was most likely very common, as this is one of the words which have surviced into NJ, and which was well attested in OCOJ. The etymology itself is somewhat uncertain.

4.1.240 wi – common rush

GZS says that the etymology is the same as for the verb *wiru* ‘be, sit’, because it was made into straw mats that people used to sit on, but with such short words it is difficult to be completely sure.

4.1.241 wo – hemp

This word is only found in compounds. ZDB mentions that it might refer to any type of fibre. This word is so short it is difficult to confirm etymological theories.

4.1.242 wogwi – common reed ?

GZS writes that it is the renyoukei of the verb *wogu*, ‘lure, entice’. In addition, Martin (1987: 52-53) notes that because of evidence from Ryukyuan, *wogwi* most likely come from proto-Japanese wogu-Ci, which excludes *kwi* ‘tree’ as a possible element, so a verbal origin is likely.

4.1.243 wominapyesi – *Patrinia scabiosaefolia*

This plant is quite certainly composed of *womina* ‘woman’ + *pyesi*. GZS notes that evidence points to that this plant might have been *wominabyesi*, because several of the characters used to write *be* were used to write *pe*, and the form ”wominabesi” is found in later sources, but the ZDB does not agree. GZS thinks that *besi* is necessitive verb extension *–be-si ‘must be’*, but since womina is a noun this is not so likely.

4.1.244 yamaararaki – *Magnolia kobus*

This plant name is probably *yama* ‘mountain’ + *araragi* ‘wild leek (?)’. The species are slightly different, but with folk taxonomy, outwards appearance can be enough for two species to be considered the same, even though they are not closely related biologically. Cf. *araraki.*

4.1.245 yamaawi – mountain indigo

The etymology of this plant is most likely *yama* ‘mountain’ + *awi* ‘indigo’. ZDB mentions that this was called *yamaawi* in order to contrast with *awi*, which was imported from China (cf. *kurenawi*).

4.1.246 yamabuki – *Kerria japonica*

The etymology is most likely *yama ‘mountain’* +*ni* ‘LOC’ *puki ‘shake’,* from the verb puk-. ‘shake’.GZS mention that *puki* could refer to the swaying motion of the plant in the wind. The logographic attestation supports this.

4.1.247 yamadisa – *Styrax* sp. (?)

The etymology of this plant is probably *yama* ‘mountain’ + *no* ’GEN’ + *tisa*, where the genitive *no* is reduced to give *disa*. Cf. *tisa*.

4.1.248 yamatadu – red elderberry

The etymology of this plant name is most likely *yama* ‘mountain’ + *tadu*, but the meaning of *tadu* is not certain. There is only one word in the ZDB with a similar structure, namely *tadu* ‘crane’, and so it is likely that the etymology lies elsewhere.

4.1.249 yamatatibana – *Ardisia japonica*

This is *yama* ‘mountain’ + *tatibana* ‘citrus’. Note however, that the ZDB writes that *yamatatibana* is not a type of citrus. *Ardisia japonica* has bright red fruits, and so the motivation behind the name might be that *yama* refers to the growth place, while *tatibana* is used comparatively.

4.1.250 yamayurikusa - uncertain

The etymology is most likely *yama-yuri* ‘mountain lily’ + *kusa* ‘leafy herb’, but the referent is uncertain, and that makes it difficult to say anything more specific on the origin. Cf. *sawi, yuri.*

4.1.251 yanagwi – willow

There are several theories about this tree name. Some suggest *ya* ’willow’ no ’GEN’ kwi ’tree’, where ya comes from the reading of the character 楊 (MC *jɨɐŋ) but one problem with this theory is that it does not explain the second nasal element after *no/na*. This is further complicated by the fact that Martin (1987: 52-53) notes that because of evidence from Ryukyuan, *yanagwi* most likely come from proto-Japanese yanagu-Ci, which excludes *kwi* ‘tree’ as a possible element.

4.1.252 yomogwi - mugwort

Although many people see yomogi as *yo*- ‘well’ *moye* ‘burn’ *kwi* ’woody herb’, *yomoekwi* ‘well-burning herb=>*yomogwi*, GSZ chooses to emphasise the theory *iyo* ’increasingly*’ moe*- ‘sprout’, *kwi* ’grass that will sprout increasingly’ . However, neither of these theories explain the nasal element in *gwi*, which should come from *Nkwi*.

4.1.253 yone – (uncooked) rice

A variant of rice. ZDB notes that OJ *yone* probably refered to NJ *kome* ‘uncooked rice’. Etymologically it seems likely that it is related to *ine*, which also has the compound form *ina*, and in fact, *yona* is also attested in later sources, as in *yonagura* ’rice granary’ The etymology is further complicated by the presence of *sine*. An etymology of yone/ine would have to account for all of these variations, and I have not been able to find any sources that do this satisfactory.

4.1.254 yudurupa – *Daphniphyllum macropodum*

GZS notes two theories: yudur-u ’ hand over’ + pa ’leaf’, and yuduru ’bow string’ + pa ’leaf’, because of the shape of the leaves. The reason behind this etymology is, as he explains, that the leaves do not fall at the same time, and that the mix of new and old leaves stand out. He concludes that the first theory is more probable. Notice that in NJ this plant name is *yuzuriha*, and is an example of a case where word medial –p- has not been weaked as in words like OJ *mape* ‘front’, NJ *mae*. Perhaps this compound was never lexicalized to the extent that *pa* no longer was considered *‘leaf’*.

4.1.255 yupunori – a type of seaweed

The motivation could be that this seaweed resembles strings made from the paper mulberry, and therefore has the etymology *yupu* ’paper mulberry string’ + *nori* ’seaweed’.

4.1.256 yuri - lily

GZS follows Tōga and Daigenkai and writes that the word *yuri* comes from Korean Ch’am-nari ‘true lily’. He believes that the name *sayuri* also comes from this. He offers no explanation of how *nari* changed to *yuri*. Another popular theory is that it is the nominal form of the verb *yur-* ’shake’ because of how it moves in the wind.

4.1.257 yusi - *Distylium racemosum*

GZS sites the daigenkai which writes that the etymology is uncertain. GZS goes on to speculate if it might be related to the readings of the characters 蚊母樹 (Middle Chinese *mi̯un *mu *dʑi̯o), but concludes that it might come from the word kusi ‘comb’. I find both theories rather difficult to support.

4.2 Corpus data analysis

The following chapers will discuss the morphology, etymology, semantics and taxonomy of the plants in the corpus, the morphological and semantic basis of which will be based on the conclusions in chapter 3.2.

4.2.1 On the terms nwo, kara, kure and ma

Although these forms are used to mean field, China/Korea and true, sometimes as an endearing term, i propose that in an ethnobotanical context they have slightly different meanings.

Although nwo is not used much in the OJ corpus, i would prefer to rather see this as *wild*¸so that nwobiru is not necessarily only leek that grows in fields specifically, but rather a type of non-cultivated piru. GZS agrees with this, and translates nwobiru (NJ nobiru) as a type of *negi* ’leek’ that grows in the wild, such as in fields or by the road.

When it comes to kara (and kure), i believe that following Berlin's theory on what happens to plant names when new species are introduced, calling them foreign, I believe this to be kara/kure in OJ, and that in both cases, the meaning China/Korea is not relevant, but rather the fact that it is not endemic. Under the discussion of NJ *tougarashi,* GZS similarly notes that *tou* is used in this way. *kara* is attested in the ZDB as simply meaning 'foreign' in several compounds, while *kure* is more narrowly defined as referring to China.

The opposite of kara/kure is, I believe, *ma*. Often it is translated as an endearing term, but I believe that it is used to refer to a prototypical example of the plant name in question.

4.2.2 Semantics and motivation

In this section I will discuss the various semantic motivational patterns based on the result of the etymological discussions in the previous section and on the motivational semantic theory from Lange (1966).

4.2.3 Semantic motivation

Looking at the data obtained from the etymologic analyzis of the plants, it is now possible to look at which semantic motivations might lie behind the naming of these plants. As mentioned I base this approach on Lange's thesis, but I will not copy his groups here, as they do not fit well.

Many of the groups that Lange uses in his theory are seen in OJ as well. Some groups seem very large. The most relevant groups for plants in OJ seems to have been outwards appearance, such as colour of leaves, fruit or flower, shape of flower, leaves or the whole plant, movement or direction of growth, taste or smell, place of growth, time of blossoming or fruit bearing, utilisation and place of origin(foreign vs. local).

4.2.4 Taxonomic structure: Modern biological overview

I will first look at the purely biological classification, before I look at how this is represented as a taxonomy. Apart from the those plants that are classed as *uncertain* by the ZDB, there are some biological classifications that are represented by a much higher number of plants than

others. One family that is very well represented is the beech family. The five biggest families found among the plant names are the Poaceae, Asteraceae, Fagaceae, Fabaceae and Liliaceae.

Table:

Sc. name	Japanese	# of words	Sc. name	Japanese	# of words
Brassicaceae	あぶらな科	3	Polygonaceae	たで科	6
Cuprassaceae	ひのき科	3	Rosaceae	ばら科	7
Cyperaceae	かやつりぐさ科	4	Fabaceae	まめ科	8
Ulmaceae	にれ科	4	Liliaceae	ゆり科	8
Magnoliaceae	もくれん科	4	Asteraceae	きく科	9
Salicaceae	やなぎ科	4	Fagaceae	ぶな科	11
Rutaceae	みかん科	5	Poaceae	いね科	15
Moraceae	くわ科	6			

While the plants in Asteraceae and Liliaceae often have beautiful flowers, on top of being valuable food and dyeing plants, the plants in Fagaceae (beech family) and Poaceae (grass family) are important because of their use in food, especially Poaceae which includes common grains such as various sorts of millet, rice and wheat. Although the beech family is not as much used today, most of its trees have edible seeds, namely acorns and true chestnuts.

4.3 Folk Taxonomic structure

4.3.1 Unique beginner in OJ

There is not much talk about unique beginners in OJ, but the fudoki uses the term 草木, glossed as *kusa-kwi*, literally 'grasses and trees'. The term is also found in the MYS, albeit there also logographically. In the Fudoki the term is used to introduce a list of plants from the various regions. The term 草木 also existed in Old Chinese, for example in the text Chuci(楚辭 ca. BC 300 - 50)[12], and it is possible that the term has been borrowed from Chinese.

4.3.2 Life form taxa in OJ

[12] Information from Thesaurus Linguae Sericae (http://tls.uni-hd.de/projectDescription/texts/texts_TLS.lasso) [Last accessed: 10.11.2014]

Life form taxa must undoubtedly have existed in Japanese, but it is very hard to establish the exact terms because of lack of data. Because we cannot ask people which plants are classified in which way, we have to rely on comparison with other languages and internal reconstruction in order to establish these terms. Since the unique beginner 草木 literally means *grasses* and *trees*, one could assume that at least these two categories existed in OJ. However, as it would be strange to have only two categories, there must be other categories as well.

As I have discussed earlier in this paper, I prefer to look at *kusa* and *kwi* as leafy and woody plants respectively, rather than strictly *grasses* and *trees*, especially when they are used as parts of plant names. Looking at the groups of plants that are heavily attested in OJ, I wonder if there might also be categories for mosses and ferns, vines, bamboos and seaweed. One could also imagine a life form taxa for mushrooms, but since there are very few mentions of mushrooms, it could seem that the term *take* is better seen as a peculiar generic taxa that stand slightly outside the core system, rather than a life form taxa.

The first clear life form taxa is kusa. Many plants include kusa in their names, but because of its use in kusa-kwi, and it's modern useage, all point towards it being a life form rather than a generic taxa.

The second clearest one is *kwi*, it is also used in many tree names, but for the same reasons as for *kusa*, it is clear that this is a generic life form. Because of names such as *yomogwi*, it is possible that this term included more than what is commonly thought of as trees, but also other woody plants.

For bamboos it seems like take is the most general term. The other terms seem more specific, so there is no better candidate. While for vines the most inclusive term for vines is probaly tura.

I say mosses *and* ferns because the ZDB notices that the word koke might have included both ferns and mosses. There are only two mosses(ipadokasipa, kage) and two ferns(sidakusa, warabi) in the corpus. The term *sidakusa* is slightly confusing, however, as if *koke* includes ferns, then what is this *fern like leafy plant*?

For seaweeds, the most probable candidate for a life term taxa is *mo*, but as there is no examples of it being used, it is not certain. Nori seems to have been a common term, but I believe this to be a generic taxa, not life form taxa because of its specific meaning.

It is also reasonable to believe that some of the members of the grass families were inlcuded in more specific life form taxa.

The term *na* seems to overlap to some degree with the other terms, especially kusa and mo. The term *pana* might also have been used with some overlap to refer to flowering plants. The terms kwi, kusa and pana are used to make names for generic taxa.

4.3.3 Generic, specific and varietal taxa in OJ

Here I will look at some of what can be said about these levels of taxonomy in OJ. Generic taxa are by far the most common, if the linguistic data is to be trusted, but there is also evidence for establishing quite a few specific taxa, and in one case perhaps also varietal taxa.

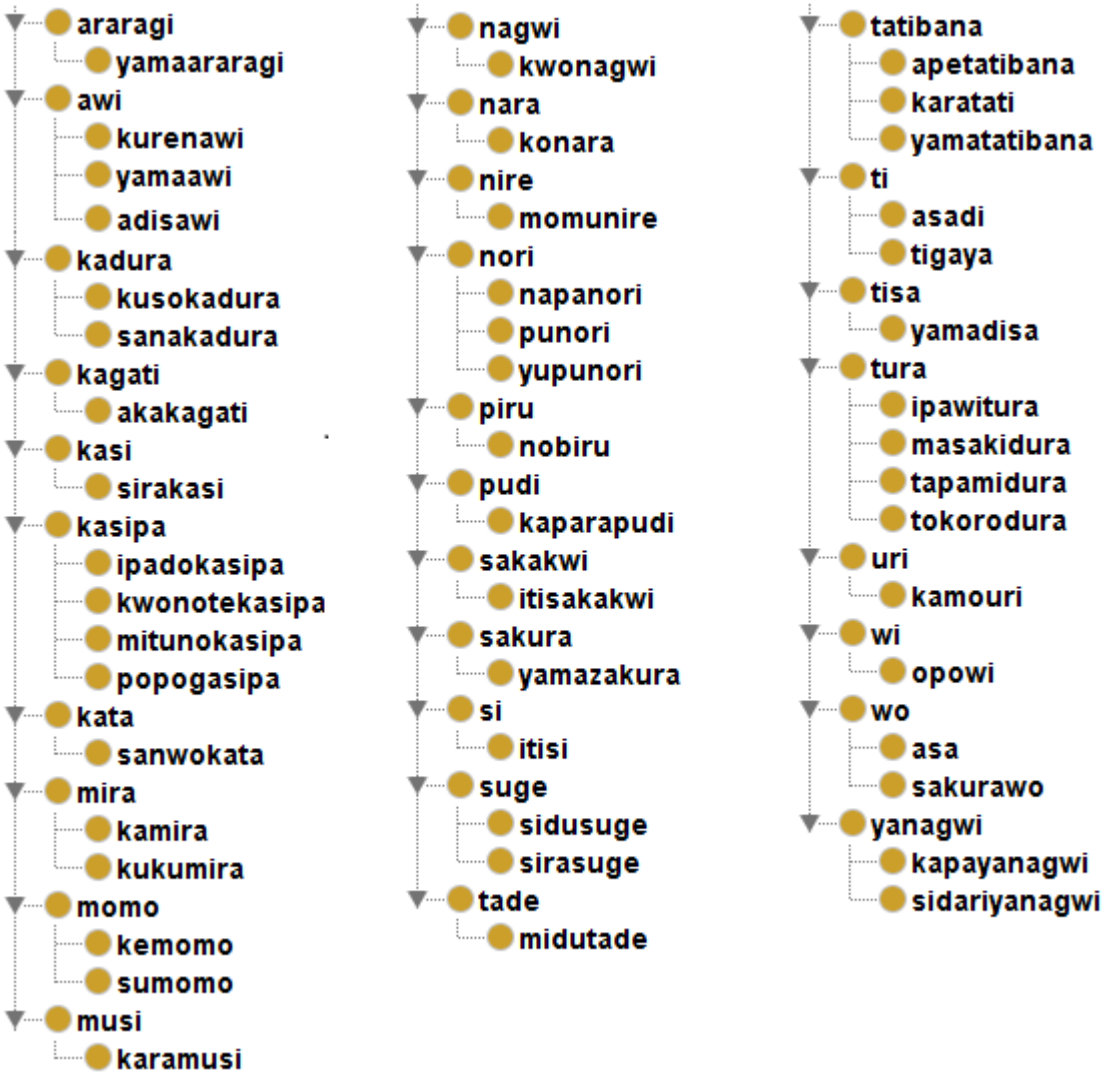
As Berlins theory shows, the specific taxa often contain the plant name from the level above it, plus a modifier of some sort. There can be exceptions to this rule, as shown by (the guy who tested Berlin's theory), but also in his data this tendency is strong, albeit not absolute. I will base parts of my analyzis of this general fact, which allows us to reconstruct a taxonomic system based on linguistic evidence, but I am well aware of the fact that some of these might be exceptions.

Counting all the plant names that are not named uncertain to any degree, or terms that are believed to refer to classes of plants, rather than individual species by the ZDB, we find 178 plant names. Of these, 81 belong to families that are either represented by only one or two members in the corpus. The following list shows how the remaining families and the corresponding number of plant names included in the corpus. Despite the large amount of unincluded plants, this list is largely representative.

Looking at the plant names themselves, it is possible to give another version of the picture. This version is more complicated, but very interesting.

I follow my etymologic analyzis and assume that in cases where plant names resemble plant names in the corpus, they are indeed compounds made with existing names. It is not uncommon to use names of other plants in a comparison-name(Lange), even if these plants are not closely related. Take for example the Norwegian word *stokkrose* 'hollyhock', lit. 'cane rose' which is not a rose in the biological sense.

I have come to the conclusion that 59 of the terms in the corpus are secondary, based on other plants. These families can be represented in the following chart



There are a few thing to note about this table, namely kadura, musi, tatibana, tura and awi, some which have been touched upon in the etymology section, but which are relevant when looking at the taxonomy.

Kadura is probably etymologically related to tura, but it seems like plants can be derived from either one, and I have decided to treat kadura as a ”level 2” name, but it is not impossible to assume that kadura is a level 3 plant name, which makes kusokadura and

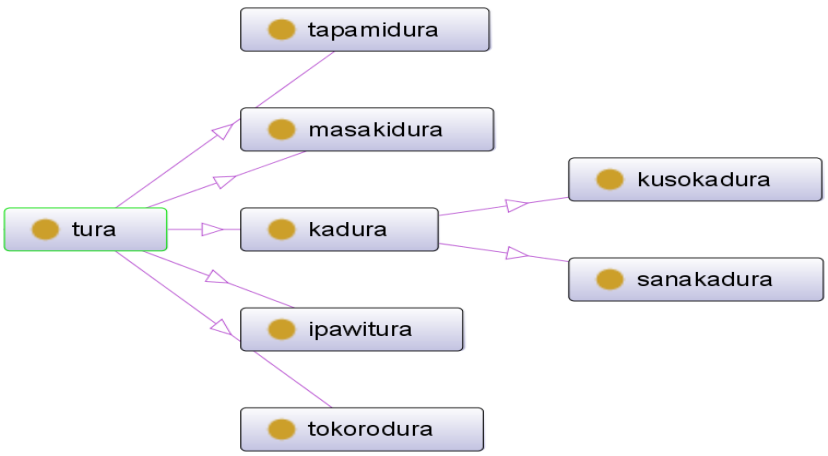
sanakadura level 4 names, which are otherwise very rare in this corpus, but not uncommon in other investigations of folk taxonomies. This has been illustrated in figure 2.

The word *musi* is not attested in OJ, but if we are to analyze *karamusi* as 'foreign musi', then it would be natural to assume that there is also some sort of non-foreign *musi*. This interpretations is based on Berlin's treatment of terms like *foreign* and *true*.

The word tatibana in the GZS is assumed to be *one* name of a plant. It could however, be possible for *tati* with the same etymology, to have existed at some earlier point by itself, with *tatibana* having a meaning similar to 'the flowers of the *tati* plant', because it is enjoyed so much for its flowers. Then this plant name became lexicalized as the most common plant term, with karatati being made before this lexicalization, and apetatibana being made *after*. There is no mention of any karatatibana in the OJ corpus.

When it comes to awi it is worth mentioning that although adisawi looks like adi-sawi, and that there is no linguistic reasons to say that it is not, the most common explanation is that it is adi+sa+awi, which therefore places it under awi, although this etymology has its problems, and not under *sawi*, which is believed to come from *yuri*.

Figure 2: Alternative representation of tura+kadura.



5 Conclusion

Looking at the results of these three part: etymology, taxonomy and motivational theory, we are able to get some insight into the exiting world of old Japanese plant names. It is certain that many of these plants have troublesome etymologies, and lack of external data make this analysis more difficult. A stricter analysis, based to a larger degree on dialectal data and on plant name formation patterns from neighbouring languages would be interesting.

We see that in some cases the same plant names are used for the same plants in modern Japanese, while some names are still in use, but for different plants. For others plants the names are only attested a few times, and their use has been discontinued. This shows that some plant names can be surprisingly stable, and it also supports the theory that common plant names keep better. It is perhaps also proof of the fact that texts such as the man'yōshuu has had a tremendously important position in the Japanese literary tradition, which undoubtedly has contributed to this tendency.

We see that when it comes to composition, Japanese plant terms to a large degree seem to confirm to the overall compositional patterns in Japanese, with perhaps a feq exceptions. These exceptions could very well be because of poor etymological reconstruction, as well as due to the special nature of plant name formation, which gives us peculiar names such as wasure-gusa and omopi-kusa, or forget-me-not in English.

We see also which major role these plants played in the OJ poetry. Just the sheer number of various plant species is proof of that. Also, through parts of the engishiki, and the old documents, we get further insight into which plants were utilized commercially, not just for their beauty. There is no doubt more to be said about these, especially regarding information from old documents, as the jidaibetsu does not cite all instances of all plants.

We also learn that some part of the OJ plant system fit partially with Berlins supposed structure, but that it is difficult to compare these old plant systems because it is impossible to say anything about what the people thought, apart from through linguistic facts and textual evidence, the second of which there is not much of the type X is a type of Y.

Last, we see that, at least as far as the proposed etymologies take us, Japanese plant names are based on similar terms as the ones proposed by Lange. They employ outwards

appearance such as shape and size, cultral connotations, growth locations, blooming time, and taste, to name some.

I would like this to be a step towards a better understanding of the development of the Japanese plant system, and perhaps as a part of understanding globally how plant systems can develop. The chance of analyzing nearly 1500 years of plant name development is extremely fascinating.

I realize that some of the attempts to clarify the etymologies of OJ plant names in this thesis have been short, and sometimes lacking. As Nordhagen has shown, it is perfectly possible to write small books on the variations of only a few plant names, and in retrospect I see that this is possible for most of the plants described in this thesis, including dialectal variation and later attestations, but this would have to be a project for later research.

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Appendix

List of plant names and details on their attestation: whether they are attested in the OCOJ, whether they are attested phonographically, logographically or mixed.

Plant name	OCOJ	Phon.	Mixed.	Log.
adimasa	yes	yes		
adisawi	yes	yes		
aduki	yes	yes		
adusa	yes	yes		yes
akakagati	no			yes
akane	yes	yes	mixed	yes
akinoka	yes			yes
amana	yes			
apa	yes			
apaki	no	yes		yes
apasa	no	yes		
apetatibana	yes	mixed		
apupi	yes			yes
aputi	yes	yes		yes
araragi	no			
asa	yes			wait
asadi	yes			wait
asagapo	yes	yes		yes
asi	yes	yes		yes
asibi	yes	yes		yes
asituki	yes			yes
atane	yes	yes		
awe	no	yes		
awi	yes	yes		yes
awonori	no		mixed	
ayamegusa	yes	yes		yes
azami	no	yes		yes
azasa	yes	yes		
e(hackberry)	yes			yes
e(perilla)	no			yes
ebi	no			yes
igisu	no	yes		
ine	yes	yes		yes
ipadokasipa	yes		mixed	
ipawitura	yes	yes		
isasa	yes	yes	mixed	
itabi	no			yes

itadori	no			yes
itibiko	no	yes		yes
itipi	yes	yes		yes
itisakakwi	yes	yes		
itisi	yes	yes		
kabura	no	yes		
kadi	no	yes		yes
kadura	yes	yes		yes
kagami	no			yes
kagati	no		yes	yes
kage	yes	yes		yes
kakemo	no	yes		
kaki	no			yes
kakitupata	yes	yes	yes	
kama	no			yes
kamira	yes	yes		
kamouri	no			yes
kanaki	yes	yes		
kapamo	yes			yes
kapana	norito			yes
kapayagwi	yes			yes
kapayanagwi	yes			yes
kape	yes			yes
kapobana	yes	yes		yes
kapogapana	yes	yes		
kapyerude	yes	yes		yes
karamusi	yes	yes		yes
karana	norito			yes
karasi	no			yes
karatati	yes			yes
kasi	yes	yes		yes
kasipa	yes	yes		yes
kata	yes	yes		
katakagwo	yes			yes
katura	yes			yes
kaya	yes	yes		yes
kaye	yes	yes		
kemomo	yes			yes
ki	no			yes
kiku	no			yes
kimi	yes	yes		
kiri	no			yes
kisa(no kwi)	no	yes		
koke	yes			yes

kokoroputwo	no		yes	yes
kome	yes	yes		yes
komo(grass)	yes	yes		yes
kwomo(seaweed)	no	yes		yes
konara	yes	yes		
kwonotekasipa	yes	yes		yes
kukumira	yes	yes		
kukutati	yes	yes		yes
kunugi	no	yes		yes
kupa	yes			yes
kurenawi	yes	no		yes
kuri	yes	yes		yes
kusi	no	yes		yes
kusokadura	yes			yes
kusu	no			yes
kuzu	yes	yes		yes
kwonagwi	yes	yes		yes
makwi				
mame	yes	yes		yes
masakidura	yes	yes		
masakinokadura	no		yes	yes
matu	yes	yes		yes
mayumi	yes	yes		yes
midutade	yes			yes
mira	yes	yes		
miru	yes	yes		yes
mitunakasipa	no			yes
mitunokasipa	no	yes	yes	yes
miyatukogi	no			yes
moduku	No	Yes		
momo	Yes			Yes
momoyogusa	Yes	Yes		
momunire	Yes	Yes		
mugi	yes	yes		yes
muku	no	yes		yes
murasaki	yes	yes		yes
muro	yes	yes		yes
na	yes	yes		yes
nadesiko	yes	yes		yes
nagwi	yes	yes		yes
nanoriso	yes	yes		yes
napanori	yes	yes	yes	
nara	yes	yes		yes
nasi	yes	yes		yes

natume	yes			yes
nebu	yes			yes
netukogusa	yes	yes		
nire	yes	yes		yes
no	yes	yes		yes
nobiru	yes	yes		
nori	yes	yes		yes
nubatama	yes	yes	yes	yes
nunapa	yes	yes	yes	yes
nuride	no			yes
ogo	no	yes		
ominokwi	yes			yes
omopigusa	yes			yes
opone	no	yes		yes
opowi	yes	yes		
pagwi	yes	yes		yes
pamayupu	yes	yes		yes
panakatumi	yes			
panezu	yes	yes		yes
papaka	no	yes		
papaswo	yes	yes		
pari	yes	yes		yes
patisu	yes	yes		yes
pazi	yes	yes		yes
pazikami	yes	yes		
pi	yes	yes		yes
pikage	yes	yes		yes
pimi	no	yes		
pipiragwi	no		yes	
piru	yes	yes		yes
pisago	norito			yes
pisagwi	yes	yes		yes
pisi	yes	yes		yes
piye	yes	yes		yes
popogasipa	yes	yes	yes	
posokwi	no	yes		yes
poyo	yes	yes		
pudi	yes	yes		yes
pudibakama	yes			yes
punori	no	yes		
sakakwi	yes			yes
sakikusa	yes			yes
sakura	yes	yes		yes
sakurawo	yes			yes

sanakadura	yes		yes	yes
sanwokata	yes	yes		
sasa	yes	yes		yes
sasage	no	yes		yes
sasibu	yes	yes		
sawi	no	yes		
seri	yes	yes		yes
si	yes			yes
sidakusa	yes		yes	
sidariyanagi	yes		yes	yes
sidusuge	yes		yes	
sikimi	yes	yes		
sine	no	Yes		yes
sinwo	yes	yes		yes
sipi	yes	yes		yes
sirakasi	yes	yes		yes
sirasuge	yes			yes
sirikusa	yes			yes
soba	yes	yes		
sworasi	no	yes		
sugamo	yes	yes		yes
suge	yes	yes		yes
sugwi	yes	yes		yes
sumire	yes	yes		
sumomo	yes			yes
susuki	yes	yes		yes
susupori	no	yes		
suwetumupana	yes			yes
swo	yes	yes		yes
tade	yes			yes
tadipi	no	yes		yes
take(bamboo)	yes	yes		yes
take(mushroom)	no			yes
taku	yes	yes		yes
tapamidura	yes	yes		
tara	no	yes		
tatibana	yes	yes		yes
tigaya	yes			yes
tisa	yes	yes		yes
titinomi	yes	yes		
tokizikinokakunokonomi	Yes		Yes	
tokorodura	Yes	yes	Yes	Yes
tubaki	Yes	Yes		Yes
tudura	Yes	yes		

tuganokʷi	yes	yes		
tuge	yes			yes
tukwi	yes	yes		yes
tukwikusa	yes			yes
tumama	yes	yes		
tumi	yes			yes
tunomata	no			yes
tupa	no	yes		
tuposumire	yes	yes		
tura	yes	yes		
turupami	yes	yes		yes
tusimo	no	yes		
tusudama	No		yes	yes
tuta	Yes	Yes		
tutipari	Yes			Yes
tutuzi	Yes			
ubara	yes	yes		yes
ukyera	yes	yes		
ukinunapa	yes			yes
ume	yes	yes		yes
umo	yes	yes		
unopana	yes		yes	
upagwi	yes	yes		yes
uragupa	yes	yes		
uri	yes	yes		
wakame	yes	yes		yes
warabi	yes	yes		yes
wasuregusa	yes			yes
wegu	yes	yes		
wi	yes	yes		
wo	yes	yes		yes
wogwi	yes	yes		yes
wominapyesi	yes		yes	yes
yamaararagi	no	yes		yes
yamaawi	yes			yes
yamabuki	yes	yes		yes
yamadisa	yes		yes	
yamatadu	yes	yes	yes	
yamatatibana	yes	yes		
yamayurikusa	no		yes	
Yamazakura	Yes	Yes		
yanagwi	yes	yes		yes
yomogwi	yes	yes		
yone	no			

yudurupa	yes	yes		
yupunori	no			
yuri	yes	yes		yes
yusi	no	yes		