

# Lexicon of Wild Plants in Gempol Village, Limbangan District, Kendal Regency: An Ecolinguistic Study

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# Abstract

Gempol Village, Limbangan District, Kendal Regency is located at the foot of Mount Ungaran. The people of Gempol Village are people who are familiar with the lexicon of wild plants. This lexicon is still maintained from generation to generation. This research aims to determine the level of intergenerational community knowledge of the wild plant lexicon. The lexicon of wild plants in this research was further narrowed down to a lexicon of wild plants that are used for consumption. This study uses a qualitative approach and is assisted with quantitative data to calculate the percentage of understanding of the wild plant lexicon. The lexicon list was obtained using interview techniques with key informants to find out the lexicon of wild plants in Gempol Village. Then data was collected through a questionnaire filled out by the people of Gempol Village. Based on the results obtained, age group I (6-25 years) in the K (Know) category obtained a percentage of 78%. Age group II (26-45) got a percentage of 94%, while age group III (46-90) knew 100% of the wild plant lexicon. This shows that the people of Gempol Village still maintain a lexicon of wild plants in communicating in everyday life.

Keywords: Ecolinguistics; Language Knowledge; Lexicon; Wild Plants

# Introduction

Wild plants are plants that grow accidentally somewhere. According to the Ministry of Forestry of the Republic of Indonesia (2012), wild plants are plants that live in the wild and/or be maintained, which still have the purity of their species. The definition of wild plants can be equated with weeds. Weeds are a type of plant that grows in unwanted places (Indonesian Biology Dictionary in Umiyati & Widayat, 2016).

These wild plants or weeds are disruptive to plantation crops. Wild plants absorb nutrients, reduce water absorption, and reduce crop yields (Umiyati & Widayat, 2016). Because of their disturbing nature, wild plants are periodically eradicated from agricultural land. Wild plants are usually eradicated with pesticides. Therefore, before being eradicated, the people of Gempol Village, Limbangan District, Kendal Regency took wild plants for their use.

Gempol Village is a Village located on the slopes of Mount Ungaran. Its location at an altitude makes it diverse in wild plant species. For the people of Gempol Village themselves, wild plants are a blessing because they can be processed into various kinds of food. Some are processed into ointment, pecel, or chips.

Community knowledge about the lexicon of wild plants that can be used as food of course has been passed down from generation to generation. However, the possibility of diminishing lexicon knowledge is unavoidable. This study aims to find out how the intergenerational level of community knowledge regarding the lexicon of wild plants that can be used as food in Gempol Village, Limbangan District, Kendal Regency.

This research uses ecolinguistic studies as the basis for its analysis. Ecolinguistic studies is a science that links ecology and language. The science of ecolinguistics became known in 1972 when an expert named Einar Haugen expressed his views on ecolinguistics. Haugen (in Garner, 2017) defines ecolinguistics as the study of the interaction of language and its environment. Ecolinguistics then developed and began to attract interest from experts for further study. According to (Stibbe, 2021), ecolinguistics is the science of ecology and language. However, it is not that simple, because linguistics affects living systems. The relationship between ecology and language is the basis for how humans treat each other in the natural world, which is greatly influenced by our thoughts, concepts, ideas, ideologies and worldviews. It is formed through the language used. It could be that the language used has double-edged blade which can be accepted positively and can also be accepted negatively. Ecolinguistic studies also consider the role of language in the relationships between humans and other humans, humans and other organisms, and humans and the physical environment around them (Stibbe, 2021).

Meanwhile, research on lexicon knowledge has been carried out by three researchers, namely Swarniti & Yuniari (2019), Putra et al. (2021), and Arafiq (2021). First, Research by Swarniti & Yuniari (2019) describes the existence of a rare tree lexicon in Denpasar. This research found 19 rare tree lexicons with a knowledge percentage of 21% for children, 47.7% for adults and 94.4% for elders. This research shows that knowledge about the lexicon of rare trees in Denpasar has begun to decrease for children compared to adults and elders. The difference between this research and the research of Swarniti and Yuniari (2019) lies in the subject and location of the research, where this research examines wild plants consumed by the people of Gempol Village, Kendal Regency.

Second, research by Putra et al. (2021) who examined the lexicon of weeds in the Javanese ethnic community in the Fajar Agung Plantation, Pegajahan District, Serdang Begadai Regency. The research found 75 lexicons of weeds. The percentage of knowledge shows that the age group I (25-45 years) knows 83.53% of the lexicon of weeds. This percentage is higher than the age group II (46-60 years) which gets 83.15%. There are several factors that affect the maintenance of the lexicon of weeds in Fajar Agung Plantation, such linguistic factors and non-linguistic factors. In contrast to this study, this study divided the age groups into three groups, namely group I (6-25 years), group II (26-45 years), and group III (46-90 years).

Third, Arafiq's research (2021) which describes the agricultural lexicon among Bima-speaking people. The research was conducted through the Facebook platform by collecting responses from users who are speakers of the Bima language. From these respondents, it can be seen that the younger age group (0-39 years) has low knowledge about the agricultural lexicon. The age of 40-50 years has a fairly good understanding ability. Age 51 and over has a high level of comprehension ability. The difference between this research and this research lies in the data collection techniques used. This study used questionnaire techniques and direct interviews.

#### Method

This study uses a qualitative method. Qualitative methods are research that aims to understand the phenomena experienced by a subject, for example in terms of perception, motivation, behavior, actions, etc. holistically. Qualitative research includes descriptions in the form of words and language in a specific context taken using natural methods (Moloeng, 2011).

This study also uses quantitative methods to help calculate the percentage knowledge of the plant lexicon. The quantitative method is a method where the data is in the form of numbers, starting from data collection, interpretation of the data, and presentation of the results of data analysis. Quantitative methods are often referred to as traditional methods because they have been a method for research for quite a long time (Priadana & Sunarsi, 2021).

The lexicon list was obtained using interview techniques with key informants to find out the lexicon of wild plants in Gempol Village. The lexicon that has been collected is then made into a questionnaire with three criteria, namely Know (K), Don't Know (DK), Ever Heard (EH). The questionnaire was then filled in by Gempol Village residents who met the criteria. The criteria for respondents are as follows, respondents have an age range of 6-90 years, limited mobility, are native speakers, and are residents of Gempol Village. Furthermore, 15 informants were selected with three age groups. Group I with an age range of 6-25 years which is in the category of children and adolescents. Group II with an age range of 26-45 which is in the adult category. Finally, group III with an age range of 46-90 is included in the criteria for the elders. This age division is adjusted to the age category according to WHO. Table I is a research questionnaire filled out by the Gempol Village community.

Table 1. Questionnaire for Testing Knowledge of Wild Plants in Gempol Village Community

No.	Plant Lexicon	Know (K)	Don't Know	Ever Heard (EH)
			(DK)	
1.	sintrong			
2.	ketul			
3.	kremah			
4	dst			

## Finding and Discussion

Based on the results of interviews with key informants, ten lexicons of wild plants were found in Gempol Village, Limbangan District, Kendal Regency. These ten lexicons were chosen to meet the criteria, namely wild plants that are used for consumption. The ten lexicons can be seen in Table 2.

Ta	ble	e 2.	Lexicon	of Wi	ld I	Plants	Consumed	in	Gempol	Village
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No.	Plant Lexicon	Istilah Latin
1.	sintrong	Crassocephalum crepidioides
2.	ketul	Bidens pilosa
3.	kremah	Alternanthera sessilis
4.	semanggi	Marsilea crenata
5.	cekuti	Galinsoga parviflora
6.	ciplukan	Physalis minima
7.	krokot	Portulaca oleracea
8.	pakis	Diplazium esculentum
9.	rendeng	Centella Asiatica
10.	kodomolo	Artemisia argyi

The following is a description of each wild plant found in Gempol Village, Limbangan District, Kendal Regency.

1. Sintrong

Sintrong (Crassocephalum crepidioides) is a wild plant that has wide, serrated leaves with fine hairs along the body of the leaf. The flowers are reddish yellow and the seeds are collected in white hairs (like dandelion flowers). The following is a picture of the sintrong plant.



Figure 1. Sintrong Plants

Sintrong plants grow at heights above 200 meters above sea level - 2,500 meters above sea level. Sintrong grows wild on roadsides, plantations and riverbanks. Sintrong likes moist places to grow. Sintrong leaves are often used by the people of Gempol Village to make 'urap' or 'gudangan'.

2. Ketul

Ketul (Bidens pilosa) is a weed plant that has pinnate leaves and pointed ends. Ketul flowers have white petals with yellow pistils. Ketul fruit is slender, elongated, slightly sharp, and black.



Figure 2. Ketul Plants

Ketul tumbuh liar di tepi jalan, lahan perkebunan, dan pekarangan. Ketul biasa dimanfaatkan sebagai bahan pangan yang diolah menjadi gudangan.

Ketul grows wild on roadsides, plantations, and yards. Ketul is usually used as a food ingredient which is processed into 'gudangan'.

3. Kremah

Kremah (Alternanthera sessilis) is a wild plant that has compound leaves facing each other. The shape of the leaves is pointed at the base and tip. Flowers from kremah plants are small and white.



Figure 3. Kremah Plants

Kremah is still related to red spinach. By the people of Gempol Village, kremah is used as a vegetable for 'urap' or 'gudangan'.

4. Semanggi

Semanggi (Marsilea crenata) is a wild plant that often lives around water sources. The four-leaf clover arranged facing each other looks like an umbrella.



Figure 4. Semanggi Plants

Semanggi leaves are usually used by brewing them to make a drink. Drinks made from semanggi leaves are believed to be able to treat heartburn and tonsillitis

#### 5. Cekuti

Cekuti (Galinsoga parviflora) is a bush with a single opposite leaf. The leaves are about 3-5 cm long. The tree is 30-60 cm tall, has a soft trunk, is erect and has joints. Cekuti has white flowers with yellow pistils. The Cekuti tree is usually eaten before it grows flowers or when it is still young.



Figure 5. Cekuti Plants

The Cekuti tree is usually eaten before it grows flowers or when it is still young. The leaves of Cekuti are usually used for cooking 'urap' or 'gudangan'. The people of Gempol Village believe that the Cekuti plant expedite breast milk production

## 6. Ciplukan

Ciplukan (Physalis minima) is a wild plant whose trees are between 15-60 cm high. Ciplukan leaves are hairless and have a smooth texture. The shape of ciplukan leaves is round and has long leaf stalks. Ciplukan flowers are bell-shaped and yellowish with black spots at the base. When young, ciplukan fruit is green and when ripe it is yellow. Ciplukan fruit has a diameter of about 1-2 cm.



Figure 6. Ciplukan Plants

Ciplukan is believed to have properties for treating high blood pressure, treating ulcer, treating bleeding gums, and so on. The people of Gempol Village usually use ciplukan fruit for direct consumption.

# 7. Krokot

Krokot (*Portulaca oleracea*) is a wild plant that has the characteristics of a short tree and soft trunk. The leaves are oval at the tip, becoming sharper as they approach the stem. The stems of the purslane plant are red.



Figure 7. Krokot Plants

Krokot is a succulent plant whose leaves are thick and fleshy. Even though it can be eaten raw, the people of Gempol Village often use it to process it into 'pecel'.

#### 8. Pakis

Pakis (*Diplazium esculentum*) are wild plants that usually grow on river banks or damp places. Ferns are creeping plants whose young leaves are used. Fern leaves are long nodes with opposite leaves. At the tip of the leaf there is a curling tendril.



Figure 8. Pakis

The people of Gempol Village often use pakis to make various food.

#### 9. Rendeng

Rendeng (*Centella Asiatica*) is the name of the people of Gempol Village to define gotu kola. Rendeng grows a lot on agricultural land, roadsides, also in rice fields.



Figure 9. Rendeng Plants

Rendeng is a vine plant and has no stem, but has a short rhizome. The leaves are shaped like a human kidney where the edges of the leaves are serrated. The rendeng plant is usually used for its leaves as a mixture for 'gudangan' or it can also be used as 'jamu'.

## 10. Kodomolo

Kodomolo (*Artemisia argyi*) is in the same family as kenikir. Kodomolo has green leaves with soft hairs on the body of the leaves. Kodomolo leaves are very similar to kenikir leaves.



Figure 10. Kodomolo Plants

Kodomolo leaves are usually cooked in various culinary dishes, apart from being a vegetable and chips, kodomolo leaves are also used as 'jamu'. Kodomolo herbal medicine is believed to improve blood circulation and reduce menstrual pain

#### **Research Results Percentage**

After conducting research using a questionnaire filled in by 15 respondents, the following percentages were obtained. Table 3 is the percentage results which have been grouped into three age groups.

No.	Age Group	Know (K)	Don't Know (DK)	Ever Heard (EH)
1.	6-25	78%	8%	14%
2.	26-45	94%	0%	6%
3.	46-90	100%	0%	0%

Tabel 3. Percentage of Knowledge Percentage of Consumed Wild Plants Lexicon in Gempol Village

Based on table 3, it can be seen that the knowledge of the Gempol Village community regarding the lexicon of wild plants that can be consumed has decreased from generation to generation. Although the decline is not that significant, it can also be an indicator of loss of knowledge of the lexicon of wild plants.

In accordance with previous research, the results in this study also show that knowledge is decreasing from generation to generation. The elders age group with an age range of 46-90 is the group with the highest knowledge about wild plants. This happens because they are more often on agricultural land and consume wild plants more frequently than other age groups. In contrast to the age group of children and adolescents, the adult age group also received a smaller percentage. Although the percentage obtained still tends to be high, it could be an indication of the loss of the lexicon of wild plants in Gempol Village. This is also influenced by cultivated vegetables which are sold more and are easy to obtain at vegetable sellers, so that the consumption of wild plants is decreasing.

## Conclusion

In accordance with the research results obtained, it can be concluded that the knowledge of the Gempol Village community regarding the lexicon of wild plants has decreased from generation to generation. Although, on average, young people still know the wild plant lexicon, indications of a decline in knowledge about the wild plant lexicon are starting to appear. The group of children and teenagers aged 6-25 years are starting to not know some of the wild plant lexicon because they rarely consume them. It is a shame that knowledge about the lexicon of edible wild plants is decreasing. This might be overcome by holding a survival class to get to know wild plants that can be consumed.

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