

Transfer of the traditional knowledge on edible plants and fruits in Anatolia in terms of gastronomic value: the case of Sivas and Yozgat

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Abstract

The study aims to determine the types of edible wild plants and fruits consumed in the culinary cultures of Yozgat and Sivas, their ethnobotanical characteristics, and the areas and forms of their uses. In the research, document analysis and semi-structured interviews were used as data collection techniques, and descriptive analysis was used as the data analysis method. The categories obtained as a result of the interview findings and the literature review consist of the areas of the uses of edible wild plants and fruits in the kitchen, their use patterns, their relationship with health, and the methods of cultivating and preserving edible wild plants and fruits. Research findings indicate that the tradition of using edible wild plants and fruits is still alive in Yozgat and Sivas.

Keywords: Gastronomy tourism, edible wild plants and fruits, Sivas Cuisine, Yozgat Cuisine

1. Introduction

Humankind struggles to obtain food and drink at every stage of his life and has met nutritional needs with wild plants and fruits collected from nature. Humanity has had to feed on wild plants and fruits since their life on Earth began. It is known that communities suffering from severe food shortages during natural or man-made disasters depend on wild plants and fruits for survival. Society, who determined the non-poisonous wild plants and fruits they found around them by trial and error, created their unique culinary culture using these wild plants and fruits (Ceylan & Şahingöz, 2019; Karaca et al., 2015; Keskin & Dönmez, 2020).

Edible wild plants and fruits, which grow depending on each region's climate and geographical structure, are used by the local people within their culinary culture. Therefore, these plants and fruits, consumed by people living in the region for nutritional purposes for a long time, are essential in forming the culture of regional cuisine (Alparslan, 2011). Information about how these wild plants and fruits are cooked, in which dishes they are used, which parts are consumed for what purpose, and whether they are harmful or harmless has been formed due to experiences transferred from the past to the present.

The edible wild plant is vegetation that usually grows spontaneously in rural areas. The Central Anatolia region

has a vibrant flora in terms of edible wild plants. Yozgat province, one of the oldest settlements and has hosted various cultures and civilizations, and Sivas, the second largest province of Turkey with its surface area, has a rich plant diversity unique to itself due to its ecological characteristics. In the rural areas of these provinces, many edible wild plants and fruits can be collected from nature and cooked or eaten raw (Çelik et al., 2017; Çelikkaya, 2020). The uses of the edible wild plants and fruits in question also differ according to the region's characteristics. Because some edible wild plants and fruits show local factors, they can belong to only one area. In this sense, the provinces of Yozgat and Sivas are destinations with a high diversity of edible wild plants and fruits, and their local wild-plants-based dishes are very effective in distinguishing them from their competitors (Şimşek et al., 2020).

Within the scope of gastronomic tourism, edible wild plants and fruits and dishes made with these plants are becoming more critical daily. However, in the literature review on edible wild plants and fruits, it has been determined that most of the resources analyzed are health-related publications (Karaca et al., 2015).

In addition, very few studies have been determined (Ceylan & Şahingöz, 2019; Çetinkaya & Yıldız, 2018; Özer & Canbulat, 2012; Tugay et al., 2018) emphasizing the

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usability of wild-plants-based dishes in terms of gastro-nomic tourism (Şimşek et al., 2020). Therefore, the present research aimed to determine the edible wild plants and fruits that grow spontaneously in the regions of Yozgat and Sivas, reveal their uses in kitchens, and choose the local dishes made with these wild edible plants and fruits. The limitedness of the research carried out in line with the purpose above for Yozgat and Sivas also makes this study significant.

2. Literature review

The edible wild plant is the vegetation that naturally grows in certain regions, does not need to be produced in terms of economic value, and is collected and consumed by local people from nature. Many types of vegetables and fruits grow in the wild. Plants such as salsify, mallow, and allseed; Fruits such as wild pear, sloe, hawthorn, and rosehip can be given as examples (Baysal, 2015). “Since people could not find bread, they had to eat raw plants they found in nature, such as cress, lettuce, plum, and cabbage” (Montanari, 1993). Wild plants, which were used for survival in the past, have been started to be used to prevent or treat diseases later on (Şimşek et al., 2020). When we look at people’s eating habits, it is seen that they managed to survive by eating wild plants and fruits they collected from nature in prehistoric times. Plants collected from nature, especially during long famine periods, were mixed with some flour and consumed as bread. For example, the Florentine historian, who witnessed the famine in 1329, expressed his experiences as follows.

When the related studies are examined, it is seen that there are studies investigating the relationship between edible plants and fruits in terms of health dimensions, gastronomy tourism, and superstitions. However, the number of studies on the health dimension is in the majority. The relationship between man and plant, which has been going on since ancient times, laid the foundation of ethnobotanical science, which the world accepts today, and numerous pieces of research are carried out (Koçyiğit, 2005). Throughout human history, many diseases have been tried to be treated by using plants in the first place. The World Health Organization (WHO) reports that approximately 80% of the world's population is trying to solve their health problems with herbal formulas (Faydaoğlu & Süröğlu, 2011). Between 50000-70000, plant species are used for medicinal purposes worldwide. About 500 of 11000 plant species in Turkey are used for medicinal purposes. The cultivation and use of medicinal, aromatic plants are increasing worldwide (Göktaş & Gıdık, 2019). It is known that wild plants have been used for medicinal purposes starting from prehistoric times in Mesopotamia, Ancient Egypt, Hittite, Greek, Roman, Seljuk, and Ottoman periods. Physicians and herbalists, who were of great importance in Ottoman medicine, prepared the medical needs of the people by using a large number of plants. The majority of the sources reached in the literature review conducted have presented that wild plants have been used for medicinal and health-related purposes (Ceylan & Şahingöz, 2019; Göktaş & Gıdık, 2019; Koçyiğit, 2005; Kumar, 2009; Lewin, 2000).

Table 1. Document analysis on edible wild plants in Sivas and Yozgat

		Publication		
	Year	Type	Title	Link
Publications on edible wild plants and fruits in Sivas	2017	Paper	Plant Names in the Dialects of Sivas Province	file:///c:/users/acer/downloads/sivas_ılı_agızlarında_bitki_adları.pdf
	2019	Article	Bioactivity and Therapeutic Properties of Evelik (<i>Rumex crispus</i>), A Naturally Growing and Edible Plant in Sivas Province	file:///c:/users/acer/downloads/sivas_ılinde_dogal_olarak_yetisen_ve_yenilebilir_b%20(1).pdf
	2002	Article	Vernacular Names and Ethnobotanical Aspects of Some Species in Gemerek (Sivas) and its Vicinity	https://dergipark.org.tr/tr/download/article-file/18657
	2010	Symposium	Medicines made from local plants in Sivas Region	https://media.ztbb.org/yayınlar/kitaplar/bitkilerle-tedavi.pdf
	2017	Report	Natural Edible Plants in Sivas and its Surroundings	https://www.kadirpurlu.com.tr/sivas-ve-cevresinde-yenilen-dogal-bitkiler/
	2020	Project	Atlas of Sivas	http://www.sivas.gov.tr/kurumlar/sivas.gov.tr/Sehir_Etiketleri/Sivas_Atlasi_Kitabi/
Publications on edible wild plants and fruits in Yozgat	2021	News	A new endemic plant (Parsley) discovered in Sivas	https://www.aa.com.tr/tr/bilim-teknoloji/sivasta-yeni-endemik-bitki-turu-kesfedildi/2359797
	2015	Report	Medicinal and Aromatic Plants	https://www.oran.org.tr/images/dosyalar/20180803161223_0.pdf
	2017	Article	Some Medicinal and Aromatic Plants Found in Yozgat-Akdağmadeni Region	https://dergipark.org.tr/tr/download/article-file/369600
	2018	News	Edible Natural Plants of Yozgat	https://www.youtube.com/watch?v=Z7ej678uIGY
	2012	Project	The Project of Yozgat's Medicinal and Aromatic Plants are Increasing in Value	https://www.kalkinmakutuphanesi.gov.tr/dokuman/yozyat-tibbi-ve-aromatik-bitkileri-degerleniyor-projesi/690
2013	News	There are 36 kinds of wild plants that can be eaten in Çayıralan.	https://yozyatmuhaber.blogspot.com/2013/01/cayiralanda-yenilebilen-36-cesit-yabani.html	

Within the scope of the literature, some studies deal with edible wild plants and fruits within the framework of gastronomic tourism. In their research, Ceylan and Akargöz (2019) investigated the uses of edible wild plants and fruits consumed in Düziçi. As a result of the research, it was determined that the participants not only consumed these wild plants and fruits raw but also used them to prepare many different dishes such as soup, salad, pilaw, appetizers, bread, and pastry. Similarly, Şimşek et al. (2020) tried to determine the uses of edible wild plants and fruits in the kitchens of Kastamonu. As a result of the study, 45 edible wild plants and fruits used in Kastamonu cuisine were determined. It has been determined that some of the edible wild plants and fruits are used as a main dish and consumed by making salad and tea. Another study investigating the culinary uses of edible wild plants and fruits was conducted by Khan, Bhat, and Narayan (2017). According to the results of the research, it has been determined that there are 800 species of edible wild plants and fruits consumed by the tribal inhabitants of India. In addition, researchers think that the tendency to consume edible wild plants and fruits are related to the socio-cultural, spiritual life, and diet of the people living in India, as in many societies. At the same time, the researchers carried out to determine the local names, areas of use, forms of services, and ethnobotanical characteristics of edible wild plants and fruits were also found in the literature (Açık & Çakıroğlu, 2018; Baser, 2010; Karaca et al., 2015).

Another dimension that needs to be dealt with regarding edible wild plants and fruits is the myths and superstitions about them. For example, it is believed to remove evil by burning incense on the dead, around and in all rooms of the house, and it is known that various wild plants are left in the cemetery for the deceased to use when they come back to life (Büyükokutan, 2007). Tarhan et al. (2016) included many stories about mandrake, mint, narcissus, olive, and peony plants in their work titled “medical plants and their myths.” In a mythological story believed in China, the ginseng plant is mentioned as follows:

“A poor boy looking after his dying father prayed to the spirit of the mountain, and the spirit of the mountain showed him where to find ginseng in his dream. The drink made from the root of the plant healed his father. According to another legend, a man found ginseng and tried to sell it for a high price. When his greed led to his arrest, he ate the root, became very powerful, and managed to escape by neutralizing the guards”. In the Genesis chapter of the Torah, it is explained that mandrake helps to get pregnant. The olive tree, on the other hand, is known as the symbol of holiness, abundance, fertility, justice, peace, health, purification, and rebirth and is described as a sacred tree in the three holy books of the monotheistic religions, the Qur'an, the Bible, and the Torah (Efe et al., 2013).

3. Methodology

All responsibility belongs to the researcher. This study was carried out with the decision of the Scientific Research and

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Sivas is Turkey's second-largest city with the largest surface area and is located east of Central Anatolia. Sivas, situated in the place where the famous Royal Road passed, is one of the oldest settlements where the historic Silk Road routes intersect in Anatolia. It was used as a military governorship in the Byzantine period due to its location on critical military roads. The Kayseri-Sivas road, completed by the Byzantine Emperor Justinos-I, was the gateway of this state to the east until the Battle of Manzikert (Demir, 2005). Sivas, also the center of one of the three metropolitan cities established in Cappadocia, has managed to become one of the biggest cities in Anatolia with its population (Akbulut, 2009: 215-216). Sivas has hosted many civilizations, with its history and culture dating back to 8000-5500 BC. After the Hittites, Phrygian, Lydian, Persian, Macedonian, Roman, Byzantine, Seljuk, and Ottoman Empires ruled in the region. Sivas, which stands out with its historical monuments, natural beauties, thermal springs, and ski tourism, is also very rich in gastronomic tourism. As in every region, Sivas's cuisine draws attention with its unique regional dishes made with herbs (Açık & Çakıroğlu, 2018).

Yozgat, one of the oldest settlements in Anatolia, has a deep-rooted past with its historical and cultural riches. It has hosted Hittite, Phrygian, Persian, Roman, Byzantine, and Anatolian Seljuks throughout history and has carried their traces to the present day (Çelik et al., 2017). It has an important geographical location because it is close to Hattusha, the Capital of the Hittite Civilization, and the Ataturk road connecting Hattusha and Cappadocia passes through the city center. Ankara-Sivas highway and Samsun-Kayseri-Mersin highway, which have an important place in international transportation, pass through Yozgat. Standing out with its national parks, Aydıncık Canyon, hot springs (Sarıkaya, Sorgun, Boğazlıyan, Yerköy, and Akdağmadeni), historical mosques, tombs, and Alişar Tumulus, Yozgat is a city suitable for developing many tourism products with its plateaus, forests, fauna, and flora (Canbolat et al., 2017).

In this sense, revealing the edible wild plants and fruit culture of the Sivas and Yozgat provinces is essential. For this purpose of the study, the research was carried out with 20 participants residing in Sivas and Yozgat and consuming edible wild plants and fruits. While determining these people, it was considered that they collected and finished edible wild plants and fruits and lived in these provinces. For the study, interviews were conducted with volunteers who consumed edible wild plants and fruits. The research was carried out between the dates of 22.09.2022 and 20.10.2022.

3.1. Data collection method and instrument

The interview method, one of the qualitative research methods, was used in the research. The qualitative research method was chosen due to the lack of studies related to the research in question and the need for more information from

the participants. In this context, document analysis and semi-structured interviews as the data collection methods, and descriptive analysis was also used as the data analysis method. More in-depth data would be obtained in the interviews to determine the using patterns, using areas, and ethnobotanical characteristics of edible wild plants and fruits within the framework of gastronomy tourism.

Within the scope of the study, the semi-structured interview technique, one of the interview techniques, was used. A semi-structured interview “consists of a series of questions and answers directed to the participant in a pre-prepared form” (Kozak, 2014). The interviewer can change the sentence structure and order of the questions during the interview, go into the details of some topics or adopt a more conversational method (Yıldırım & Şimşek, 2008). The first group of the interview form asks questions about the participants' demographic information. The questionnaire, which

was created as a result of the document analysis and the content analysis, was presented to 6 experts in the field, and necessary corrections were made in line with the suggestions.

The second group of questions aims to obtain information about edible wild plants and fruits grown in the region, their areas of use, preservation methods, their relationship with health, and their relationship with superstitions. Ethics committee permission was granted regarding the interviews held on September 21, 2022 (36/32) by the Scientific Research and Publication Ethics Committee of Yozgat Bozok University for conducting interviews with the participants. The audio recordings, notes, and images taken from the interviews between 22.09.2022 and 20.10.2022 were transcribed and written. It was seen that the discussions varied between 15 and 30 minutes. The themes and sub-themes determined within the scope of the research method are listed in Table 2.

Table 2. Themes, sub-themes, and descriptions

Themes	Sub-themes	Descriptions
The areas of uses of the edible wild plants and fruits in the kitchens	Uses for health purposes Uses in the kitchens Uses in relation to superstitions Purchasing	It covers the areas and patterns of uses of the edible wild plants and fruits that grow spontaneously in Yozgat and Sivas.
The cultivation and preservation methods of the edible wild plants and fruits	Handpicking Preserving by drying Preserving by deep-freezing	It covers the methods of cultivation and preservation of the edible wild plants and fruits.
The sources of knowledge on the edible wild plants and fruits	Intergenerational transfer of knowledge	It covers the sources of knowledge on what edible wild plants and fruits are, how they are cooked, how they are preserved, and how they are served.

3.2. Data analysis

In this context, content analysis was carried out based on the qualitative research method in the study of data obtained from the participants who consume edible wild plants and fruits. This research consists of coding the data, creating the themes, organizing the codes and themes, and defining and interpreting the findings. In the descriptive analysis, it is essential to understand and present the data related to the problem under the themes, categories, and sub-themes, with direct quotations from interview transcripts, document texts, and observation notes. In a way, it is essential to give who said what on which themes in the interview transcripts without commenting with direct quotations, and at the same time, it is necessary to analyze the participants' views on the relevant theme with direct quotes related to that theme, by associating them with the collected documents and observation notes and increasing the internal validity of the research (Günbayı, 2019). The information obtained in the in-depth participant interviews was categorized and analyzed. To not reveal the participants' identities, codes were given as Y1, Y2, Y3.....Y10 for the interviews held in Yozgat and as S1, S2, S3..... S10 for the discussions held in Sivas and the quotations were mentioned this way.

4. Findings

The findings from this research, which tries to determine the usage areas of edible wild plants and fruits in Anatolian

Cuisine and their relationship with gastronomic tourism, and the demographic characteristics of the participants consuming edible wild plants and fruits are in Table 3.

In Table 4, the findings of the interviews regarding the usage areas of edible wild plants and fruits consumed in the provinces of Sivas and Yozgat are presented within the scope of gastronomy. The first theme of the research, edible wild plants and fruits are used in different ways when we look at the findings on the use of culinary areas. Information on the culinary benefits of edible wild plants and fruits is given in Table 4. When the table is examined, it is seen that most plants are cooked as the primary food ingredient and used to flavor some dishes. The participant with the code S8 gave the following information about the general benefits of plants. “We make food from all seeds, hibiscus fritters and roasts, and salad from salsify.”

Curled dock is a broad-leaved plant. The participant with code S1 stated, “We have wormseed; it is eaten with yogurt similar to spinach. When it is fresh, we make a wrap from the leaves. We have stinging nettle, we cook from its leaves and stems, and sometimes we dip the leaf in salt and eat it”.

The participant with the code S2 described the cooking of allseed, which is cooked in almost every home in the region, as follows. “We chop the allseed finely, then add some

onions, pastrami, and oil in the pot; after that, we put some macaroni and a little cracked wheat on it... finally, we put spices and close the lid... it is cooked with a little water.”

As a result of the interviews, it was determined that different types of edible wild plants and fruits were used. For example, participant S3 gave the following information on this subject.

“We have ramps... We don’t need onions when we put them in the food; they taste like a mixture of onion and garlic; it is challenging to chop them, burn our eyes, and are costly... There is a tree root called biyon, like miswak, it can be absorbed, it can be used when children cough, it is good for health.”

To the question “Which parts of the edible wild plants do you use?” almost all of the participants stated that they benefited from the leaves and twigs of edible wild plants, S1, S2, S3, S5, S8, S9, S10, and Y5 stated that they used the whole plant. At the same time, it was determined that the participants acquired their knowledge and experience about using edible wild plants from their family elders from an early age.

When Table 4 is examined, it is seen that all participants collected the edible wild plants and fruits from the mountains, gardens, and watersides by their means. For example, the participant with the code Y5 stated, “There were no markets in the past; we could not buy them ready.” The participant with the code S2 gave the following information about the methods of cultivating the plants.

“We do not buy it, we handpick from nature by ourselves, but there are also those who buy. The price is quite high. A glass of ramps is around 50 Turkish Liras.”

Another theme of the research findings is the preservation method of edible wild plants and fruits. When Table 4 is examined, it is seen that all of the participants preserved the plants by drying, deep-freezing, or using fermentative methods. For example, participant S2 gave the following information about the preservation methods of the plants.

“Allseed is preserved in the deep freezer, and ramps are preserved by drying; we make jam from fruits such as pears and rosehips, and we make a lot of pickled hawthorns.”

The participant with the code S6 stated, “There is a mountain pear, we call it çördik, we pickle it, we drink it with meals in winter.”

When Table 5 is examined, it is seen that edible wild plants and fruits are mainly consumed for health purposes, and the use of beliefs and myths is shallow. It is also seen that most of the plants are consumed as tea. At the same time, it was determined that most participants learned health-related usage information from their family elders. For example, participant S1 gave the info below regarding hawthorn fruit.

“We eat hawthorn fruits; we make tea from their flowers; we drink them; they protect us from diseases in winter; we pickle them and drink their juice.”

In general, edible wild plants and fruits are used to prevent diseases. The participants, S1 and S5, stated the following regarding rosehip and stinging nettle.

“In the past, my mother used to boil these herbs and make them tea so that we don’t get sick; now, people drink them as medicine.”

Table 3. Demographic characteristics of the participants

Participants	Age	Educational level	Occupation	Duration of residence in the region
Y1	43	Bachelor	Government officer	43
Y2	55	Bachelor	Government officer	55
Y3	46	Bachelor	Electrical technician	46
Y4	36	Primary school	Worker	36
Y5	60	Primary school	Housewife	60
Y6	60	Primary school	Housewife	60
Y7	50	Bachelor	Government officer	50
Y8	50	Primary school	Housewife	40
Y9	45	Primary school	Housewife	45
Y10	62	No formal education	Housewife	62
S1	55	Middle school	Public education artist	55
S2	41	Middle school	Cafe manager	41
S3	60	Primary school	Housewife	60
S4	57	Middle school	Private sector employee	57
S5	49	Primary school	Housewife	49
S6	60	Primary school	Confectioner	60
S7	57	Primary school	Pensioner	57
S8	40	Primary school	Housewife	40
S9	52	Bachelor	Cook	52
S10	42	High school	Housewife	42

Table 4. Information on the areas of uses of the edible wild plants and fruits in the research area within the scope of culinary arts

The Latin name of the plant	Local name of the plant	The used part of the plant	Local people's way of using the plant	Preservation method	Cultivation method	Participants
<i>Polygonum cognatum</i>	Allseed	Twigs and Leaves	The food is prepared by cooking the small cut all-seeds with butter, pastrami, and cracked wheat.	Drying or Deep-freezing	Handpicking	Y1, Y2, Y3, Y4, Y5, Y6, Y7, Y8, Y9, Y10, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10
<i>Malva sylvestris</i>	Mallow	Twigs and Leaves	It is cooked with butter, onions, cracked wheat, and spices, and it is used as a filling for pastries.	Deep-freezing	Handpicking	Y1, Y2, Y3, Y4, Y5, Y6, Y7, Y8, Y9, Y10, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10
<i>Crataegus oxyacantha</i>	Hawthorn	Fruit	It is consumed raw as a fruit, and marmalade can be made. It is also consumed as vinegar.	Pickle	Handpicking	Y1, Y2, Y3, Y4, Y5, Y6, Y7, Y8, Y9, Y10, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10
<i>Rosa canina</i>	Rosehip	Fruit	It is consumed for breakfast as rosehip extract and marmalade; it is boiled in water and drunk.	Marmalade or Deep-freezing	Handpicking	Y1, Y2, Y3, Y4, Y5, Y6, Y7, Y8, Y9, Y10, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10
<i>Labada</i>	Curled Dock	Twigs and Leaves	The leaves are boiled for a very short time and wrapped. It is also consumed raw as a salad.	Eaten in Season	Handpicking	Y1, Y2, Y3, Y4, Y5, Y6, Y7, Y8, Y9, Y10, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10
<i>Urtica</i> spp.	Stinging Nettle	Twigs and Leaves	Its leaves and stems are boiled and cooked, and the leaves are salted and eaten raw.	Eaten in Season	Handpicking	Y2, Y3, Y4, Y5, Y6, Y7, Y8, Y10, S5, S8
<i>Mentha pulegium</i> L.	Pennyroyal	Twigs and Leaves	After drying, it is thoroughly roasted in butter and placed in glass bottles, especially in soups with yoghurt.	Drying	Handpicking	Y4, Y8, Y9, Y10, S7, S10
<i>T. pratensis</i> subsp. <i>pratensis</i>	Salsify	Twigs and Leaves	It is usually eaten raw as a salad. It can also be fried by adding other vegetables to it.	Eaten in Season	Handpicking	Y5, Y8, S5, S6, S7, S8, S9,
(<i>Thymus vulgaris</i>) (Lamiaceae)	Thyme	Leaves	It is consumed by brewing in boiling hot water. It is dried and consumed as a spice.	Drying	Handpicking	Y5, Y8, Y10, S2, S5
<i>Berberis vulgaris</i> , <i>Berberis vulgaris</i> L.	Berberis	Fruit	Sherbet and compote are made from the fruit.	Eaten in Season	Handpicking	Y5, S1, S6, S7, S9
<i>P. communis</i> L.	Wild pear: Pear, hyssop	Fruit	The fruit is eaten, dried into flour and used in making desserts. It is also pickled.	Drying, Pickle, Marmalade	Handpicking	Y5, Y6, Y7, Y8, Y10, S1, S2, S6, S7, S8, S9
<i>Allium scorodoprasum</i> L.	Ramps	Whole Plant	It has a mixed flavor of onion and garlic, and is used in almost every dish, and its dried form is consumed as a spice.	Drying	Purchasing or Handpicking	S1, S2, S3, S5, S10
<i>Glycyrrhiza glabra</i> L.	Biam: licorice root	Twigs	After washing, it is applied into the mouth and absorbed.	Drying	Handpicking	S1, S2, S5
<i>Chenopodium album</i> L.	Telce: Wormseed	Leaves	Wormseed is roasted with butter and onions, then eggs are added, and eaten with garlic yogurt.	Eaten in Season	Handpicking	S1, S2, S4, S5
<i>Prunus spinosa</i>	Sloe: Bullace Grape: All-heal	Fruit	Sloes are boiled and filtered. It is consumed by adding sugar and lemon before drinking.	Marmalade or Deep-freezing	Handpicking	Y5, Y8, Y9, Y10, S5, S6, S7, S9
<i>Cerastium armeniacum</i> Gren)	Bride's Finger	Whole Plant	Bride's finger, which looks like a spinach plant, can be roasted with onions and butter, and its pastry is made.	Eaten in Season	Handpicking	S1, S5, S8, S9, S10
Asteraceae	Chamomile	Flower	It is consumed after waiting for a while in boiling water.	Drying	Handpicking	Y5

Table 5. The uses of the edible wild plants and fruits growing in Yozgat and Sivas for health purposes and superstitious beliefs

Latin name of the plant	Local name of the plant	Local people's way of using the plant	Intended usages	Participants
Asteraceae	Chamomile	The flowers are brewed as tea.	It is good for colds.	Y5
Peganum harmala	Wild rue	The fruit is burned as incense.	It is considered to protect from the evil eye and harms.	Y5, S1, S2, S3
Rosa canina	Rosehip	The fruit is used as a tea.	It is considered to be good for heart patients.	S1, S5, Y5, S6,
Crataegus monogyna	Hawthorn	The flower is used as a tea.	It is thought to be beneficial to health.	S10, S1, S3, Y5
Glycyrrhiza glabra L.	Biyam	Roots are dried and absorbed.	It is considered to be good for cough	S1, S2, S5,
Viburnum opulus	Crampbark	Pickles are made from the fruit.	It is considered to be good for kidney patients.	Y5, Y1, Y3
Tragopogon reticulatus	Salsify	The leaves are consumed as tea.	It is considered to be good for abdominal pain.	Y5, S1, S3, S8
Urtica	Stinging Nettle	It is boiled and cooled and consumed as tea.	It is considered to protect against cancer.	Y1, Y4, Y5, S1, S2, S3, S4, S10

5. Discussion and conclusion

This research aims to obtain information about the types of edible wild plants and fruits consumed in the culinary culture of Yozgat and Sivas, their areas of use, consumption styles, and local dishes made with these herbs. In this context, when edible wild plants were examined within the scope of gastronomy, it was discussed that they are consumed as the main dish, salad, pastry, tea, spice, and pickle, and the leaves are used by brewing like tea in terms of health. Şimşek et al. (2020) stated that edible herbs were widely used as spices, tea, food, and salad. It has been determined that their uses for health purposes are mainly in tea (Durmuş & Çakmak, 2020).

As a result of the interviews, it is pointed out that the tradition of using edible wild plants and fruits still maintains its vitality in Yozgat and Sivas, and there is a shared cultural heritage of edible wild plants and fruits. This result of the research is in parallel with the results of Ceylan and Akar-Şahingöz's (2019) study to determine the consumption habits of edible wild plants (Ceylan & Akar-Şahingöz, 2019). According to the research findings, the region's edible wild plants and fruits are used for health and economic purposes. Although it is not widely used for myths and superstitions, it is observed that there is a transfer of knowledge from the past.

As a result of the research, there are studies on the determination of the varieties of edible wild plants and fruits, areas of their uses, their use patterns, and the prescription of local dishes made with these edible wild plants and fruits in Anatolia; however, there are no studies that scientifically examine the effects of these dishes on health. Therefore, the nutritional values of the dishes prepared with local plants and fruits should be determined by chemical analysis. Meals made with these plants and fruits can be used as an alternative product in the fight against obesity and other health problems due to malnutrition.

As a result of the interviews, it has been observed that those who recognize the edible wild plants and fruits

consumed in the region are over a certain age. To raise awareness among young people and ensure cultural knowledge is preserved, information about edible wild plants and fruits should be obtained from experienced and knowledgeable people, and these meals should be prescribed. The transfer of knowledge from generation to generation is vital for preserving and maintaining local and regional diversity and cultural richness. In this context, the activities to be carried out on the collection and the uses of edible wild plants and fruits from nature in the tours to be made in the region and the festivals to be organized would contribute to the recognition of edible wild plants and fruits.

Increasing epidemic diseases in recent years have led people to consume natural and healthier nutrition. When this is the case, it is seen that edible wild plants and fruits have begun to take their place in neighborhood markets, festivals, and many different places, albeit a little. This situation can be used as an additional element in the continuity of the culture of edible wild plants and fruits. In addition, the fact that the research covers only Sivas and Yozgat may create a limitation for the analysis. However, similar studies to be conducted in other regions would contribute to the present study's findings.

5.1. Implications

The study concluded that edible wild plants and fruits that grow spontaneously around Yozgat and Sivas provinces are in the majority. It is seen that these plants, which are used in both main dishes and salads in Anatolia, are preferred because they are considered healthy. As a result of the interviews, it is determined that the participants who know edible wild plants and prepare different foods with these plants are generally over 50. By creating and recording the recipes of foods and beverages made with edible wild plants, the consumption habits of these plants can be prevented from being forgotten.

5.2. Limitations and future research

The study is limited to evaluating the information obtained through the interview forms conducted on the participants

who consumed edible wild plants between 22nd September and 20th October 2022.

Since the study was carried out in some areas of Yozgat and Sivas provinces and between specific dates, new research in different cities and dates may contribute to the literature on edible wild plants. For example, future research may be based on comparative information from participants who consume and do not consume edible wild plants. Additionally, the nutritional values of the dishes made with these plants can be revealed by chemical analysis, and dishes with different dietary contents can be developed with these plants in future studies.

Author contributions

The author declares that she contributed to the design and implementation of the research, the analysis of the results, and the writing of the article.

Disclosure statement

The author reported no potential competing interest.

Ethics committee approval

All responsibility belongs to the researcher. This study was carried out with the decision of the Scientific Research and Publication Ethics Committee of Yozgat Bozok University dated 21.09.2022 and numbered 36/32.

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