Scientific Papers. Series B, Horticulture. Vol. LXX, No. 1, 2026
Print ISSN 2285-5653, CD-ROM ISSN 2285-5661, Online ISSN 2286-1580, ISSN-L 2285-5653

ANALYSIS OF SOCIAL BEHAVIOUR IN THE CONTEXT OF VALORISATION OF FRUIT RESOURCES IN NATURAL ECOSYSTEMS

Florin Daniel STAMIN[1], Sina Niculina COSMULESCU[2]

[1]Doctoral School of Plant and Animal Resources Engineering, Faculty of Horticulture, University of Craiova, A.I. Cuza Street, No. 13, 200585, Craiova, Romania
[2]Department of Horticulture and Food Science, Faculty of Horticulture, University of Craiova, A.I. Cuza Street, No. 13, 200585, Craiova, Romania

Corresponding author email: sina.cosmulescu@edu.ucv.ro

Abstract

Wild fruits are valuable natural resources with significant nutritional, therapeutic, and economic potential; however, their role in modern food systems and local economic development remains insufficiently explored in many regions. This study aimed to analyze public perceptions regarding consumption, their economic valorisation, and their contribution to local community development. Data were collected through a questionnaire examining consumption habits, perceived health benefits, knowledge of traditional products, and attitudes toward economic activities related to wild fruits. The results indicate a moderate level of consumption, although most respondents recognize their health benefits and their role in a balanced diet. Participants also show openness toward the economic use of wild fruits through activities such as harvesting, processing, marketing, and integration into rural tourism. Many respondents believe that establishing collection centres or small processing units could stimulate local economic development. However, the relatively low level of knowledge about traditional products made from wild fruits suggests a decline in transmitting this knowledge between generations. Overall, the findings highlight the potential of wild fruits to support healthy diets, diversify rural economies, and promote the sustainable use of natural resources.

Key words*: ecosystem resources, local communities, rural development, rural tourism, traditional knowledge, wild fruits.*

INTRODUCTION

Food and nutrition security is a major challenge facing the world today (Duguma, 2020). Over 820 million people worldwide are undernourished, with the highest proportions located in developing countries (Garekae & Shackleton, 2020), while the increased consumption of highly processed foods negatively affects human health (Levy et al., 2024). Wild plants can play an important role as an essential component of people's diets in some regions of the world and can provide greater dietary diversity (Motti, 2022), helping to safeguard food security, nutritional variation, and sustainable incomes (Kidane & Kejela, 2021). The importance and possible contribution of wild fruit trees to reducing food poverty have been recognized, and several researchers have explored the nutritional and economic potential of these plants (Nishimwe et al., 2024). Wild fruits are an important source of nutrition for one in six people worldwide. They provide an important source of nutrition for low-income people, while also representing an important source of income for improving the living standards of rural communities (Ghanbari et al., 2022). Wild fruits are generally characterized by high medicinal and nutritional values, higher fibre content (Jiru et al., 2023), and richness in antioxidants (Tamayo-Vives et al., 2023) and flavonoids (Mwamatope et al., 2023). In addition to their nutritional perspectives, many of them have shown important beneficial results in the prevention and cure of several chronic diseases, such as age-related disorders (Coppari et al., 2021), cardiac disorders (Wahabi et al., 2025), diabetes (Semwal et al., 2023), and various types of cancer (Ul Abidin et al., 2023). In many indigenous societies, knowledge about wild fruit plants has been passed down from generation to generation, forming an integral part of local ecological and ethnobotanical traditions. However, despite their importance, many of these plants remain underutilized and underexplored, limiting their potential applications in sustainable agriculture, pharmaceuticals, and the food industry (Saensouk et al., 2025). Globally, the commercialization of wild fruits has also

contributed considerably to income generation. Several edible wild fruits are found in local markets and represent an important source of income (Melaku & Ebrahim, 2021). Seeking out untouched rural areas outside cities during the COVID-19 crisis, tourists have rekindled interest in consuming traditional foods based on wild natural products (Luković et al., 2024). The source of income based on wild plants is achievable through their collection and marketing, practical use in gastronomy, tourism, guided tours, natural products, etc. The cultural ecosystem services provided by these plants, as an intangible range of services, include categories related to aesthetics and sense of place, biological and intangible cultural heritage, tourism, and recreational activities, with educational and spiritual functions (Luković et al., 2023). Many communities have developed summer festivals with indigenous wild fruits as a central theme, demonstrating that they are essential for rural tourism and have a great potential for the local economy (Everett, 2007). Thus, wild fruits can contribute to supplementing household income and participating in the substantial development of rural communities that benefit from this natural resource. The purpose of this study is to analyse the perceptions and attitudes of the population towards the consumption and use of wild fruits, both from the perspective of health and socio-economic potential. The study aims to assess the degree of knowledge and use of these fruits and products derived from them, the impact of their commercialization on local households and communities, as well as the tourism potential associated with these natural resources.

MATERIALS AND METHODS

The research method used in this study was that proposed by Melinescu & Cosmulescu (2022) and consisted of developing an online questionnaire using the Google Forms platform, a digital tool that allows the automatic creation, distribution, and collection of responses. The questionnaire included 20 questions aimed at assessing the respondents' perceptions of wild fruits, which were organized into three thematic sections (Table 1). The questionnaire was distributed online through the Google Forms platform and promoted via the social media networks Facebook and Instagram to facilitate rapid access for respondents. The sample included 100 respondents, Romanian citizens, belonging to different age categories. The questionnaire was structured into three sections. The first section included single-answer questions regarding the socio-demographic characteristics of the respondents (gender, age category, level of education, and occupation). The second section included a multiple-choice question regarding 10 species of wild fruit trees from the spontaneous flora of Romania, to assess the level of knowledge of them, as well as single-choice questions assessed on a Likert scale with five levels of intensity (“to a very great extent” - “not at all”), to which the option “cannot appreciate” was added. This section also included a binary question (yes/no). The third section included questions on perceptions related to the valorisation of wild fruits, formulated on a Likert scale, along with a trichotomous question (yes/no/don’t know) and a nominal question.

RESULTS AND DISCUSSIONS

A. Descriptive data of the sample

The analysis of the data provided by the 100 respondents showed that, in terms of the structure of the respondents by gender (Table 2), the sample was composed of 61% women and 39% men, with the majority of female participants being evident. This type of distribution is frequently encountered in research that has, as its main subject, natural products and their consumption (Yobo et al., 2020; Suwardi et al., 2020; Suwardi & Mukhtar, 2023; Gruszecka-Kosowska et al., 2023), where women tend to show increased interest in the consumption of natural foods and products from spontaneous flora. Thus, it can be admitted that the increased participation of women in such studies may be associated with an increased interest in their daily diet and their own health, which is also supported by the study by Bärebring et al. (2020), conducted on a group of individuals in Sweden, where it was found that women pay increased attention to a healthy lifestyle, frequently researching the latest information on nutrition and diet.

Table 1. Questionnaire structure

Question
Section A: Descriptive data of the sample
I. Gender:
II. Age:
III. Latest completed studies:
IV. Occupation:
Section B: Perceptions of wild fruit consumption and use
V. What wild fruits do you know?
VI. To what extent do you consume natural products based on wild fruits (food supplements, teas, syrups, tinctures, creams, etc.)?
VII. Does the family use such fruits or products made from such fruits?
VIII. Do you know people outside the family who consume wild fruits or products obtained from their processing?
IX. Do you think that wild fruits can contribute to maintaining health?
X. Do you think that wild fruits can be integrated into children's diets?
XI. Do you consider that products obtained from wild fruits can constitute food supplements that contribute together with medicines to the treatment of certain diseases?
Section C: Perception of the socio-economic potential of wild fruits
XII. Can the marketing of wild fruits bring additional income to your household?
XIII. Who do you think should be entitled to market them?
XIV. Can the commercialization of wild fruits contribute to the development of the local community?
XV. If you were paid, would you take part in wild fruit picking campaigns?
XVI. Do you think that the presence of a collection centre or a factory that would process wild fruits would contribute to the development of the local community?
XVII. Can picking wild fruits represent an activity that contributes to the development of the local community from a tourism point of view?
XVIII. If rural tourism were practiced in your area, would you agree to take part in various activities or sell products based on wild fruits?
XIX. Do you know of any traditional products that can be obtained from wild fruits?
XX. In your opinion, was this resource better exploited in the past?

For the sample structure by age (Table 2) of the respondents, six age classes were established. The most numerous age classes were 14-25 years (26%) and 26-35 years (20%), totalling 46%, the category of elderly people (over 65 years) was the least represented, comprising only 10% of the respondents. However, the distribution of respondents was balanced, with no classes having a representation of less than 10%. The large number of young people may bring to the fore their perception of the consumption of wild fruits and natural products, given that, as shown by the study by Mothupi & Shackleton (2025), the intake of traditional fruits and vegetables is limited. A contribution to this decrease in consumption may be the erosion of ethnobotanical knowledge about traditional plants, especially among young people; traditional skills and knowledge about the consumption and usefulness of wild fruits tend to be forgotten by new generations. Generational differences were also recorded in the study by Pawera et al. (2020), where data obtained from respondents in Indonesia highlighted a lack of knowledge regarding the taste, preparation, or cultivation of these fruits. Thus, compared to a generation ago, the current generation is facing the loss of traditional knowledge regarding the diversity and uses of spontaneous plants in particular (Ilie & Cosmulescu, 2023). An important cause of this phenomenon may be the lack of transmission of traditional knowledge regarding spontaneous plants. The level of education of the respondents (Table 2) indicates a sample structure dominated by people who have completed at least the mandatory levels of schooling. The best represented category is that of respondents with higher education, which amounts to 32% of the total participants. However, the highest share is found among people who have completed an average level of education, distributed across two categories: high school graduates (28%) and vocational school graduates (18%). Together, these two categories represent 46% of the sample, exceeding the proportion of respondents with higher education. The least represented categories are those corresponding to low levels of education. Thus, 9% of respondents had only completed primary or secondary school, and 13% stated that they had not completed any education at the time of completing the questionnaire. The structure of the sample highlights the predominance of middle and higher education levels, suggesting the presence of individuals who, through their training, may demonstrate a relatively high level of information on the properties and benefits of wild fruits, as well as the advantages of consuming them.

Table 2. Descriptive data of the sample

I. Gender	Percentage (%)	II. Age	Percentage (%)	III. Latest education	Percentage (%)	IV. Occupation	Percentage (%)
Male	61%	14-25 years	26%	No education	13%	No occupation	18%
		26-35 years	20%	Primary school/gymnasium	9%	Student/University student	19%
		36-45 years	12%	Vocational school	18%	Employed in state organisation	13%
Female	39%	46-55 years	18%				
		56-65 years	14%	High school	28%	Employed in private sector	37%
		over 65 years	10%	Higher education	32%	Retired	12%

However, in terms of traditional knowledge, it is possible that this is not significantly influenced by the level of formal education. For example, the study conducted by Yangdon et al. (2022) did not identify significant differences between the respondents' level of education of the respondents and their degree of knowledge of indigenous information.

On the other hand, the research conducted by Egg et al. (2020) on a sample of adolescents in Austria highlighted that a higher level of education can be associated with a healthier lifestyle and a higher level of nutritional knowledge. This phenomenon is explained by the inclusion, within the educational curriculum, of subjects dedicated to nutrition and health, designed to contribute to the development of nutritional literacy, as well as to the improvement of eating behaviours and lifestyle among children and adolescents. In terms of the occupation of the respondents (Table 2), the largest share is represented by people employed in the private sector (37%). The lowest proportions were recorded among public sector employees and pensioners, with each of these categories representing 13% of the total respondents. The category of pupils and students constituted 19% of the sample, while people without employment represented 18%.

The level of household income, influenced by occupational and socio-economic status, can play an important role in the adoption of behaviors oriented towards maintaining a healthy lifestyle, as well as in the availability to purchase or collect products from spontaneous flora (Stadlmayr et al., 2023). In this context, low-income families may postpone or even avoid the purchase of natural products, prioritizing the purchase of basic foods. However, access to spontaneous plant resources should not constitute a major difficulty, given their wide spread in the European space (Chrysargyris et al., 2023).

B. Perception of the consumption and use of wild fruits

To determine the familiarity levels (Table 3) of respondents with the most commonly encountered wild fruits in temperate climates, 10 species of wild fruit shrubs were introduced into the questionnaire, tracking whether respondents knew these plants or not. Thus, the most popular fruit shrub was the rosehip (*Rosa canina*) recognized by 83% of individuals, followed by wild strawberries (*Fragaria vesca*) (80% of respondents) and raspberries (*Rubus idaeus*) (80% of respondents). Other fruit shrubs that were recognized by a percentage of over 70% of respondents were: the crab apple (*Malus sylvestris*) (77%), the blackberry (*Rubus fruticosus*) (74%), the cherry plum (*Prunus cerasifera*) (72%) and the wild pear (*Pyrus pyraster*) (71%). The hawthorn (*Crataegus monogyna*) and the blackthorn (*Prunus spinosa*) were recognized by 51% and 53% of respondents, respectively, and the cornelian cherry (*Cornus mas*) was only known by 33% of people who knew it.

Table 3. Level of knowledge of wild fruits

No.	Species	Percentage (%)
1.	Cherry plum (*Prunus cerasifera*)	72%
2.	Rosehip (*Rosa canina*)	83%
3.	Hawthorn (*Crataegus monogyna*)	51%
4.	Blackthorn (*Prunus spinosa*)	53%
5.	Crab apple (*Malus sylvestris*)	77%
6.	Wild pear (*Pyrus pyraster*)	71%
7.	Cornelian cherry (*Cornus mas*)	33%
8.	Wild strawberries (*Fragaria vesca*)	81%
9.	Blackberry (*Rubus fruticosus*)	74%
10.	Raspberry (*Rubus idaeus*)	80%

These results support the fact that respondents are familiar with fruits found in spontaneous flora, especially with species frequently found in rural landscapes or traditionally used in food, such as rose hips or lingonberries. Differences in recognition between species may reflect both regional distribution and the degree of promotion or use of these fruits in households and in the food industry. The popularity of rose hips can be explained by their ecology, often found in rural landscapes (Stamin & Cosmulescu, 2024a; Stamin & Cosmulescu, 2025), the multitude of beneficial effects already recognized in the specialized literature (Cosmulescu et al., 2017; Kilinc et al., 2020; Khelfi et al., 2024), but also by the high content of bioactive compounds (Peña et al., 2023; Fetni et al., 2020; Alecu et al., 2025; Cardoso-Avila et al., 2021) and especially vitamin C (Arslan et al., 2020; Stamin et al., 2024; Mazzara et al., 2023; Tafreshi et al., 2025), which is why, in Romania, this species is known and often used in teas, tinctures, and various pharmaceutical products. The analysis of responses regarding their own consumption of products obtained from wild fruits (Table 4) indicates a moderate trend of use. Thus, 31% of respondents stated that they use such products "to a small extent", and 28% "to a large extent". Also, 18% reported use "to a very small extent", 13% "to a very large extent", 9% do not consume at all, and 1% could not assess the level of consumption. The distribution of responses suggests occasional rather than regular use of these products. Moderate consumption may also be influenced by the seasonal availability of wild fruits (Ding et al., 2021). However, Hockings et al. (2020) showed that plant density or fruiting period do not significantly influence human selection of fruits, with people being willing to seek the desired resources regardless of their abundance. """ Regarding consumption at the family level (Table 4), the responses follow a similar pattern. Most respondents indicated use “to a small extent” (32%) or “to a large extent” (28%), while the categories “to a very small extent” and “to a very large extent” each recorded 16%. The lowest proportions were for families that do not consume such products at all (7%) or cannot assess the level of consumption (1%). The results indicate that wild fruit products are present in households, but do not represent a constant component of the diet for most respondents. In cases where consumption is more frequent, it may be associated with local traditions and knowledge regarding the use of natural resources, considered important for the adaptation of communities to socio-ecological changes (Punchay et al., 2020).

Table 4. Perception of the consumption and use of wild fruits

Answer options	In very large extent	Largely	In small measure	In very small measure	Not at all	I cannot appreciate
VI. Consumption level of natural products based on wild fruits	13%	28%	31%	18%	9%	1%
VII. Use wild fruit and derived products within the family	16%	28%	32%	16%	7%	1%
VIII. Knowledge of other people who consume wild fruits or derivative products	Yes – 71%			No – 29%		
IX. Perception regarding the contribution of wild fruits to maintaining health	34%	41%	14%	5%	4%	2%
X. Perception regarding the integration of wild fruits into children's diets	30%	33%	34%	5%	4%	4%
XI. Perception regarding the role of wild fruit products as adjuvant dietary supplements in the treatment of diseases	36%	36%	16%	7%	1%	4%

The analysis of extra-family interactions (Table 4) shows that 71% of respondents know people outside the household who consume wild fruits or derived products, while 29% stated the opposite. This result suggests that the use of these products is perceived as being present at the community level, not just within the family. Consumption observed in the social environment can contribute to the consolidation and transmission of food practices through the exchange of information and the adoption of common habits. In the context of the transformation of food environments, urbanization and modernization determine significant changes in lifestyle and food practices, including the replacement of traditional markets with modern stores and the change of cultural meanings associated with food consumption (Wertheim-

Heck & Raneri, 2020). The perception of the benefits of consuming wild fruits (Table 4) is predominantly positive. The majority of respondents (76%) consider these products to be beneficial for health, of which 41% appreciated the benefits “to a great extent” and 34% “to a very great extent”. Lower percentages were recorded for the categories “to a small extent” (14%), “to a very small extent” (5%), “not at all” (4%) and “cannot appreciate” (2%). These results indicate that wild fruits are associated with favorable health effects, a perception that can be correlated with their high content of vitamins, antioxidants, and bioactive compounds, frequently highlighted in the specialized literature (Čulum et al., 2025; Moldovan et al., 2021; Kotsou et al., 2024; Wilk et al., 2025; Bei et al., 2023; Mitea et al., 2025; Radbeh et al., 2020; Demir et al., 2020; Moldovan et al., 2022; Stamin & Cosmulescu, 2024b). The respondents’ opinion regarding the integration of wild fruits into children’s diets (Table 4) is generally favorable. Thus, 33% of respondents assessed this possibility as “to a large extent” and 30% as “to a very large extent”. However, 24% indicated the category “to a small extent”, suggesting a certain reservation regarding the inclusion of these products in children’s diets. Negative perceptions were less frequent: 5% chose the option “to a very small extent”, and the categories “not at all” and “cannot appreciate” recorded 4% each. These reservations can be associated with concerns about food safety, possible allergies, or low familiarity with such products. At the same time, the issue of child nutrition remains relevant globally, in the context of which undernutrition affects approximately 162 million children under five years of age, while overweight and obesity are increasing even in low-income countries (Sahoo et al., 2021). The role of wild fruit products as adjuvant food supplements in the treatment of diseases (Table 4) was positively assessed by the majority of respondents. A total of 72% believe that they can be useful in combination with drug treatments, with the categories "to a very large extent" and "to a large extent" each recording 36%. Lower percentages were observed for "to a small extent" (16%), "to a very small extent" (7%), "not at all" (1%) and "cannot assess" (4%). The results indicate a favorable perception of the complementary therapeutic potential of wild fruits, also supported by the specialized literature (Basavarajappa et al., 2023; Ez-Zahra et al., 2024; Goudjil et al., 2024; Ousaaid et al., 2025; Khelfi et al., 2024; Tiboni et al., 2020; Coppari et al., 2021; Condello et al., 2021; Nawrot et al., 2022; Badoni et al., 2024), although the existence of some reserved opinions suggests a certain caution related to clinical efficacy or the level of information of the population.

C. Perception on social-economic potential of wild fruits

Regarding the potential for generating income through the marketing of wild fruits (Table 5), the opinions of the respondents are relatively varied. The largest share (31%) was recorded in the category of those who consider "to a large extent" that these products can generate income. However, a significant part of the respondents expressed reservations: 25% appreciated this possibility "to a small extent", 8% "to a very small extent", and 15% considered that this potential does not exist at all. A similar percentage (15%) assessed the idea "to a very large extent", and 6% could not appreciate it. The observed reluctance may be associated with perceptions regarding the demand or market value of these products, although the literature highlights a significant economic potential of wild fruits in various regions, such as Iran (Ghanbari et al., 2022), South Africa (Salami et al., 2022) or Sudan (Musa et al., 2023). At the European level, the annual economic value of products from wild flora is estimated at approximately €23.3 billion, with the highest revenues reported in Russia (€3.7 billion), France (€3.4 billion), Germany (€3.2 billion) and Turkey (€2.5 billion). In contrast, lower values were estimated for Ireland (€37.7 million), the Netherlands (€65.9 million) and Estonia (€89.5 million), while Romania ranks ninth, with approximately €0.6 billion annually (Lovrić et al., 2020). The analysis of the perception of the economic actors that should market wild fruits (Table 5) shows a relatively diverse distribution of options. The most frequently mentioned categories were individuals (29%), the local community (22%) and the Forestry District (20%). Private companies or organizations and city halls were each selected by 13% of respondents, while other state institutions registered only 3%.

Table 5. Perception on social-economic potential of wild fruits

Answer options	In very large extent	Largely	In small measure	In very small measure	Not at all	I cannot appreciate
XII. Perception regarding income potential associate marketing fruit savage	15%	31%	25%	8%	15%	6%
XIII. Perception regarding POTENTIAL PLAYERS justified saddle commercialize fruits savage	Local city hall – 13%	Detour in the area – 20%	People physical – 29%	Community local – 22%	Other state institutions – 3%	Private companies/organizations – 13%
XIV. Perception regarding the contribution of wild fruit trading to local community development	27%	31%	27%	7%	5%	3%
XV. Respondents' willingness to participate in paid wild fruit picking campaigns	26%	35%	23%	6%	8%	2%
XVI. Perception of the impact of a collection center or processing unit on local community development	35%	36%	19%	6%	4%	0%
XVII. Perception of the potential of wild fruit picking as a local tourism development activity	26%	35%	21%	12%	5%	1%
XVIII. Willingness to participate in activities or to market wild fruit products in the context of rural tourism	31%	39%	16%	8%	4%	2%
XIX. Knowledge of traditional products made from wild fruits	Yes – 48%			No – 52%		
XX. Perception regarding level of fruit exploitation savage in last	Yes – 61%		No – 12%		Don't know – 27%	

The results suggest that respondents perceive the valorization of wild fruits as a responsibility shared between the individual, community, and institutional sectors. The lack of a clear consensus indicates the possibility of collaboration models between local communities and public institutions, oriented towards the sustainable exploitation of these resources without affecting ecosystems. Relevant examples in this regard come from countries such as Brazil, Kenya, Guatemala, India, Mali, Sri Lanka and Turkey, which have integrated edible wild species into national food system programs and policies. These initiatives aim to strengthen the evidence on the nutritional and biocultural value of these resources, integrate them into food security strategies, and raise consumer awareness, while benefiting from financial support from international bodies such as the Global Environment Facility (GEF), the International Fund for Agricultural Development (IFAD) or the European Commission (Borelli et al., 2020). The responses on the perception of the contribution of wild fruit marketing to local community development (Table 5) indicate a predominantly positive assessment. Thus, 31% of respondents consider the impact to be "to a large extent", and 27% "to a very large extent". At the same time, 27% appreciate the contribution "to a small extent", while negative assessments are lower: 7% "to a very small extent", 5% "not at all", and 3% could not appreciate. The results suggest that respondents perceive the valorization of wild fruits as having economic and social potential for local communities, including through the generation of income and jobs. Similarly, a study conducted in Indonesia showed that these resources constitute an important source of food and income, being harvested by approximately 86% of respondents and contributing about 43% to the annual income of households (Navia et al., 2020). Regarding participation in paid wild fruit picking campaigns (Table 5), the results indicate a high willingness: 35% of respondents would be involved "to a large extent", and 26% "to a very large extent". Another 23% of people indicated a "small" willingness, while only 6% declared themselves very unwilling, 8% would not participate at all, and 2% could not assess. These results suggest a considerable interest in such activities, especially if they are associated with economic benefits. In the literature, the collection of wild plants and fruits is often associated with cultural or recreational activities, while also contributing to the provision of ecosystem services in urban and peri-urban environments (Fischer & Kowarik, 2020; Sardeshpande & Shackleton, 2023).

The perception of the impact of establishing collection centres or processing units (Table 5) is also favourable. The majority of respondents consider this initiative beneficial for the community, with 36% evaluating it "to a very great extent" and 35% "to a great extent". Another 19% of the responses indicate "to a small extent", while negative assessments are limited (6% "to a very small extent" and 4% "not at all"). These results reflect the perception that such infrastructures can contribute to the development of the local economy, the efficient use of natural resources, and the creation of jobs. Regarding the potential of wild fruit collection as a tourist activity (Table 5), the majority of respondents believe that it could contribute to the development of local tourism: 35% evaluated the impact "to a very great extent", and 26% "to a great extent". More reserved assessments include 21% "to a small extent" and 12% "to a very small extent". The results suggest the opportunity to integrate this activity into the local tourism offer through the development of thematic routes, gastronomic experiences, or seasonal events. A relevant example is the Catalonia region of Spain, where wild food gathering represents a cultural ecosystem service integrated into rural and agrotourism, a phenomenon known as "fruit tourism" (Fusté-Forné, 2022; Crespi-Vallbona et al., 2023; Ginés-Ariza et al., 2023). Respondents' assessments of the potential participation in activities or marketing of wild fruit products in the context of rural tourism (Table 5) indicate a high level of availability. In total, 70% of respondents assessed this possibility favourably, of which 39% "to a large extent" and 31% "to a very large extent". Another 16% of the responses indicated "to a small extent", while the proportions of those who were reluctant were reduced (8% "to a very small extent" and 4% "not at all"), and 2% could not assess. The results suggest that the integration of activities of collecting, processing, or marketing wild fruit products into rural tourism is perceived as an opportunity to diversify income and capitalize on local traditions, thus contributing to rural development (Mahapatra & Panda, 2012). Regarding the knowledge of traditional products made from wild fruits (Table 5), the results indicate a relatively balanced situation: 47% of the respondents declared that they are familiar with such products, and 53% stated that they do not know them. These data may reflect a moderate visibility of these products in the communities analysed, possibly influenced by urbanization, the orientation towards modern foods and medicines, and the limited transmission of knowledge between generations (Punchay et al., 2020; Faruk et al., 2024). The perception regarding the level of exploitation of wild fruits in the past (Table 5) shows that the majority of respondents (61%) believe that these resources were exploited more intensively than at present, while 12% indicated the opposite, and 27% could not assess. This perception can be explained by the existence, during the communist period, of organized programs for the collection of wild fruits coordinated by state institutions, which encouraged the participation of the population and the systematic exploitation of these resources, a situation similar to that observed in the Soviet Union (Bexultanova et al., 2022; Faruk et al., 2024).

CONCLUSIONS

The results of the study indicate that wild fruits are perceived by respondents as valuable resources from a nutritional, therapeutic, and economic point of view, but their consumption generally remains moderate. Most participants recognize the health benefits of these products and consider that they can be part of a healthy diet, although their use is rather occasional. Respondents also show significant openness to the economic exploitation of wild fruits. A significant proportion believes that their commercialization can contribute to the development of local communities and the generation of additional income. In this context, there is interest in participating in activities such as paid collection, processing, or marketing of products within rural tourism. Also, most respondents positively perceive initiatives regarding the establishment of collection centres or processing units, considered opportunities for stimulating the local economy and the sustainable exploitation of natural resources. At the same time, the moderate level of knowledge of traditional products suggests a decrease in the intergenerational transfer of knowledge related to the use of wild fruits. Overall, the results

highlight the potential of these resources for rural development, provided that strategies are implemented to support their sustainable valorisation and the promotion of local traditions.

REFERENCES

Alecu, A., Albu, C., Badea, G. I., Alionte, A., Enache, A. A., Radu, G. L., & Litescu, S. C. (2025). Infrared Laser-Assisted Extraction of Bioactive Compounds from *Rosa canina* L. *International Journal of Molecular Sciences*, *26*(3), 992. https://doi.org/10.3390/ijms26030992

Arslan, E. S., Akyol, A., Örücü, Ö. K., & Sarıkaya, A. G. (2020). Distribution of rose hip (*Rosa canina* L.) under current and future climate conditions. *Regional Environmental Change*, *20*(3), 107. https://doi.org/10.1007/s10113-020-01695-6

Badoni, S., Rawat, D., Mahato, A. K., Jangwan, N. S., Ashraf, G. M., Alexiou, A., Tayeb H. O., Alghamdi B. S., Papadakis M., & Singh, M. F. (2024). Therapeutic potential of cornus genus: navigating phytochemistry, pharmacology, clinical studies, and advanced delivery approaches. *Chemistry & Biodiversity*, *21*(8), e202301888. e202301888. https://doi.org/10.1002/cbdv.202301888

Bärebring, L., Palmqvist, M., Winkvist, A., & Augustin, H. (2020). Gender differences in perceived food healthiness and food avoidance in a Swedish population-based survey: a cross sectional study. *Nutrition journal*, *19*(1), 140. https://doi.org/10.1186/s12937-020-00659-0

Basavarajappa, G. M., Rehman, A., Shiroorkar, P. N., Sreeharsha, N., Anwer, M. K., & Aloufi, B. (2023). Therapeutic effects of *Crataegus monogyna* inhibitors against breast cancer. *Frontiers in Pharmacology*, *14*, 1187079. https://doi.org/10.3389/fphar.2023.1187079

Bei, M. F., Apahidean, A. I., Budău, R., Rosan, C. A., Popovici, R., Memete, A. R., Domocoș, D., & Vicas, S. I. (2023). An overview of the phytochemical composition of different organs of *Prunus spinosa* L., their health benefits and application in food industry. *Horticulturae*, *10*(1), 29. https://doi.org/10.3390/horticulturae10010029

Bexultanova, G., Prakofjewa, J., Sartori, M., Kalle, R., Pieroni, A., & Sõukand, R. (2022). Promotion of wild food plant use diversity in the Soviet Union, 1922–1991. *Plants*, *11*(20), 2670. https://doi.org/10.3390/plants11202670

Borelli, T., Hunter, D., Powell, B., Ulian, T., Mattana, E., Termote, C., Pawera, L., Beltrame, D., Penafiel, D., Tan, A., Taylor, M., & Engels, J. (2020). Born to eat wild: An integrated conservation approach to secure wild food plants for food security and nutrition. *Plants*, *9*(10), 1299. https://doi.org/10.3390/plants9101299

Cardoso-Avila, P. E., Patakfalvi, R., Rodríguez-Pedroza, C., Aparicio-Fernández, X., Loza-Cornejo, S., Villa-Cruz, V., & Martínez-Cano, E. (2021). One-pot green synthesis of gold and silver nanoparticles using *Rosa canina* L. extract. *RSC advances*, *11*(24), 14624-14631. https://doi.org/10.1039/D1RA01448J

Chrysargyris, A., Baldi, A., Lenzi, A., & Bulgari, R. (2023). Wild plant species as potential horticultural crops: An opportunity for farmers and consumers. *Horticulturae*, *9*(11), 1193. https://doi.org/10.3390/horticulturae9111193

Condello, M., & Meschini, S. (2021). Role of natural antioxidant products in colorectal cancer disease: A focus on a natural compound derived from *Prunus spinosa*, Trigno ecotype. *Cells*, *10*(12), 3326. https://doi.org/10.3390/cells10123326

Coppari, S., Colomba, M., Fraternale, D., Brinkmann, V., Romeo, M., Rocchi, M. B. L., Di Giacomo, B., Mari, M., Guidi, L., Ramakrishna, S., Ventura, N., & Albertini, M. C. (2021). Antioxidant and anti-inflammaging ability of prune (*Prunus spinosa* L.) extract result in improved wound healing efficacy. *Antioxidants*, *10*(3), 374. https://doi.org/10.3390/antiox10030374

Cosmulescu, S., Trandafir, I., & Nour, V. (2017). Phenolic acids and flavonoids profiles of extracts from edible wild fruits and their antioxidant properties. *International Journal of Food Properties*, *20*(12), 3124-3134. https://doi.org/10.1080/10942912.2016.1274906

Crespi-Vallbona, M., & Plana-Farran, M. (2023). Fruiturisme: The boost of fruit tourism in Catalan rural areas. *Tourism Planning & Development*, *20*(6), 1160-1181. https://doi.org/10.1080/21568316.2022.2122072

Čulum, D., Čopra-Janićijević, A., & Vidic, D. (2025). The investigation of selected bioactive compounds and antioxidant properties of *Crataegus monogyna* L. *Natural Product Research*, *39*(17), 5099-5103. https://doi.org/10.1080/14786419.2024.2367009

Demir, B., Sayinci, B., Sümbül, A., Yaman, M., Yildiz, E., Çetin, N., Karakaya, O., & Ercişli, S. (2020). Bioactive compounds and physical attributes of *Cornus mas* genotypes through multivariate approaches. *Folia Hortic*, *32*, 189-202. https://doi.org/10.2478/fhort-2020-0018

Ding, X. Y., Zhang, Y., Wang, L., Zhuang, H. F., Chen, W. Y., & Wang, Y. H. (2021). Collection calendar: the diversity and local knowledge of wild edible plants used by Chenthang Sherpa people to treat seasonal food shortages in Tibet, China. *Journal of Ethnobiology and Ethnomedicine*, *17*(1), 40. https://doi.org/10.1186/s13002-021-00464-x

Duguma, H. T. (2020). Wild edible plant nutritional contribution and consumer perception in Ethiopia. *International Journal of Food Science*, *2020*(1), 2958623. https://doi.org/10.1155/2020/2958623

Egg, S., Wakolbinger, M., Reisser, A., Schätzer, M., Wild, B., & Rust, P. (2020). Relationship between nutrition knowledge, education and other determinants of food intake and lifestyle habits among adolescents from urban and rural secondary schools in Tyrol, Western Austria. *Public Health Nutrition*, *23*(17), 3136-3147. https://doi.org/10.1017/S1368980020000488

Everett, H. (2007). A welcoming wilderness: The role of wild berries in the construction of Newfoundland and

Labrador as a tourist destination. *Ethnologies*, *29*(1), 49-80. 49-80. https://doi.org/10.7202/018745ar

Ez-Zahra Amrati, F., Mssillou, I., Boukhira, S., Djiddi Bichara, M., El Abdali, Y., Galvão de Azevedo, R., Mohamed, C., Slighoua, M., Conte, R., Kiokias, S., Pontes, G. S., & Bousta, D. (2024). Phenolic composition of *Crataegus monogyna* Jacq. extract and its anti-inflammatory, hepatoprotective, and antileukemia effects. *Pharmaceuticals*, *17*(6), 786. https://doi.org/10.3390/ph17060786

Faruk, A., Nersesyan, A., Papikyan, A., Galstyan, S., Hakobyan, E., Barblishvili, T., Mikatadze-Pantsulaia, T., Darchidze, T., Kuchukhidze, M., Kereselidze, N., Kikodze, D., Willey, I., Ryan, P., & Breman, E. (2024). Multigenerational differences in harvesting and use of wild edible fruits and nuts in the South Caucasus. *Plants, People, Planet*, *6*(1), 238-248. https://doi.org/10.1002/ppp3.10434

Fetni, S., Bertella, N., Ouahab, A., Zapater, J. M. M., & Fernandez, S. D. P. T. (2020). Composition and biological activity of the Algerian plant *Rosa canina* L. by HPLC-UV-MS. *Arabian Journal of Chemistry*, *13*(1), 1105-1119. https://doi.org/10.1016/j.arabjc.2017.09.013

Fischer, L. K., & Kowarik, I. (2020). Connecting people to biodiversity in cities of tomorrow: Is urban foraging a powerful tool?. *Ecological Indicators*, *112*, 106087. https://doi.org/10.1016/j.ecolind.2020.106087

Fusté-Forné, F. (2022). Seasonality in food tourism: Wild foods in peripheral areas. *Tourism Geographies*. https://doi.org/10.1080/14616688.2018.1558453

Garekae, H., & Shackleton, C. M. (2020). Foraging wild food in urban spaces: the contribution of wild foods to urban dietary diversity in South Africa. *Sustainability*, *12*(2), 678. https://doi.org/10.3390/su12020678

Ghanbari, S., Weiss, G., Liu, J., Eastin, I., Fathizadeh, O., & Moradi, G. (2022). Potentials and opportunities of wild edible forest fruits for rural household's economy in Arasbaran, Iran. *Forests*, *13*(3), 453. https://doi.org/10.3390/f13030453

Ginés-Ariza, P., Fusté-Forné, F., & Noguer-Juncà, E. (2022). Valorising the rural pantry: Bridges between the preservation of fruits and slow tourism in Catalonia. *Journal of Agriculture and Food Research*, *10*, 100386. https://doi.org/10.1016/j.jafr.2022.100386

Goudjil, S., Boussekine, S., Goudjil, S., Goudjil, H., Yilmaz, M. A., Ola, M. S., Ali, A., & Cakir, O. (2024). Investigation of Algerian *Crataegus monogyna* Jacq phenolic compounds (Using LC-ESI-MS/MS Analysis, Antioxidant Activity, and Enzyme Inhibition) and Their potential implications for food and nutraceutical applications. *Antioxidants*, *13*(11), 1350. https://doi.org/10.3390/antiox13111350

Gruszecka-Kosowska, A., Mazur-Włodarczyk, K., & Wódkowska, A. (2023). Native vs. Unique Fruit Popularity: Exploring the Sustainable Fruit Consumption in Poland. *Sustainability*, *15*(14), 10953. https://doi.org/10.3390/su151410953

Hockings, K. J., Parathian, H., Bessa, J., & Frazão-Moreira, A. (2020). Extensive overlap in the selection of wild fruits by chimpanzees and humans: implications for the management of complex social-ecological systems. *Frontiers in Ecology and Evolution*, *8*, 123. https://doi.org/10.3389/fevo.2020.00123

Ilie, D., & Cosmulescu, S. (2023). Spontaneous plant diversity in urban contexts: A review of its impact and importance. *Diversity*, *15*(2), 277. https://doi.org/10.3390/d15020277

Jiru, N. A., Fekadu Gemede, H., & Keyata, E. O. (2023). Nutritional composition and antioxidant properties of selected underutilized wild edible fruits in East Wollega zone, Western Ethiopia. *International Journal of Fruit Science*, *23*(1), 34-45. https://doi.org/10.1080/15538362.2023.2166649

Khelfi, S., Zerizer, S., Bensouici, C., Tebibel, S., & Kabouche, Z. (2024). The antioxidant activity and the protective effect of *Rosa canina* L. fruit against intestinal inflammation induced by hyperhomocysteinemia in mice. *Pharmaceutical Chemistry Journal*, *57*(11), 1778-1788. https://doi.org/10.1007/s11094-024-03079-0

Kidane, L., & Kejela, A. (2021). Food security and environment conservation through sustainable use of wild and semi-wild edible plants: a case study in Berek Natural Forest, Oromia special zone, Ethiopia. *Agriculture & Food Security*, *10*(1), 29. https://doi.org/10.1186/s40066-021-00308-7

Kilinc, K., Demir, S., Turan, I., Mentese, A., Orem, A., Sonmez, M., & Aliyazicioglu, Y. (2020). *Rosa canina* extract has antiproliferative and proapoptotic effects on human lung and prostate cancer cells. *Nutrition and cancer*, *72*(2), 273-282. https://doi.org/10.1080/01635581.2019.1625936

Kotsou, K., Magopoulou, D., Chatzimitakos, T., Athanasiadis, V., Bozinou, E., Sfougaris, A. I., & Lalas, S. I. (2024). Enhancing the nutritional profile of *Crataegus monogyna* fruits by optimizing the extraction conditions. *Horticulturae*, *10*(6), 564. https://doi.org/10.3390/horticulturae10060564

Levy, R. B., Barata, M. F., Leite, M. A., & Andrade, G. C. (2024). How and why ultra-processed foods harm human health. *Proceedings of the Nutrition Society*, *83*(1), 1-8. https://doi.org/10.1017/S0029665123003567

Lovrić, M., Da Re, R., Vidale, E., Prokofieva, I., Wong, J., Pettenella, D., Verkerk, P. J. & Mavsar, R. (2020). Non-wood forest products in Europe–A quantitative overview. *Forest Policy and Economics*, *116*, 102175. https://doi.org/10.1016/j.forpol.2020.102175

Luković, M., Kostić, M., & Dajić Stevanović, Z. (2024). Food tourism challenges in the pandemic period: getting back to traditional and natural-based products. *Current Issues in Tourism*, *27*(3), 428-444. https://doi.org/10.1080/13683500.2023.2165481

Luković, M., Pantović, D., Kostić, M., Veljović, S., & Bugarcic, J. (2023). Food plant diversity in cultural ecosystem services perspective: edible plants as a driver for improving the offer of gastro-tourism. https://doi.org/10.18485/ecologica.2023.30.110.5

Mahapatra, A. K., & Panda, P. C. (2012). Wild edible fruit diversity and its significance in the livelihood of indigenous tribals: Evidence from eastern India. *Food Security*, *4*(2), 219-234. https://doi.org/10.1007/s12571-012-0186-z

Mazzara, E., Caprioli, G., Simonelli, G., Mustafa, A. M., Maggi, F., & Cespi, M. (2023). Microwave hydrodiffusion and gravity extraction of vitamin C and antioxidant compounds from rosehips (*Rosa canina* L.). *Foods*, *12*(16), 3051. https://doi.org/10.3390/foods12163051

Melaku, A., & Ebrahim, M. A. (2021). Critical review on wild-edible fruit species in Ethiopia. *International Journal of Forestry Research*, *2021*(1), 8538188. https://doi.org/10.1155/2021/8538188

Melinescu, A., & Cosmulescu, S. (2022). Residents' perception and preferences with regard to fruit species in public spaces and private gardens. In *First International Future Challenges in Sustainable UrbanPlanning & Territorial Management: Proceedings of the SUPTM 2022 conference* (pp. 155-158). Universidad Politécnica de Cartagena. https://doi.org/10.31428/10317/10366

Mitea, G., Schröder, V., Iancu, I. M., Lupoae, M., Dumitru, C. N., & Radu, M. D. (2025) *Prunus spinosa* L.–Source of Bioactive Compounds with Antioxidant and Pharmacological Predicted activity. *Polish Journal of Environmental Studies*. https://doi.org/10.15244/pjoes/209837

Moldovan, C., Frumuzachi, O., Babotă, M., Menghini, L., Cesa, S., Gavan, A., Sisea, C. R., Tanase, C., Dias, M. I., Pereira, C., Ferreira, I., Crișan, G., Mocan, A., & Barros, L. (2021). Development of an Optimized Drying Process for the Recovery of Bioactive Compounds from the Autumn Fruits of *Berberis vulgaris* L. and *Crataegus monogyna* Jacq. *Antioxidants*, *10*(10), 1579. https://doi.org/10.3390/antiox10101579

Moldovan, R., Mitrea, D. R., Florea, A., Chiș, I. C., Suciu, Ș., David, L., Moldovan, B. E., Mureșan, L. E., Lenghel, M., Ungur, R. A., Opriș, R. V., Decea, N., & Clichici, S. V. (2022). Effects of gold nanoparticles functionalized with bioactive compounds from *Cornus mas* fruit on aorta ultrastructural and biochemical changes in rats on a hyperlipid diet—a preliminary study. *Antioxidants*, *11*(7), 1343. https://doi.org/10.3390/antiox11071343

Mothupi, F. M., & Shackleton, C. M. (2025). Traditional knowledge and consumption of wild edible plants in rural households, Limpopo Province, South Africa. *Journal of Ethnobiology and Ethnomedicine*, *21*(1), 23. https://doi.org/10.1186/s13002-025-00773-5

Motti, R. (2022). Wild edible plants: a challenge for future diet and health. *Plants*, *11*(3), 344. https://doi.org/10.3390/plants11030344

Musa, F. I., Sahoo, U. K., Eltahir, M. E., Magid, T. D. A., Adlan, O. E., Abdelrhman, H. A., & Abdelkarim, A. A. (2023). Contribution of non-wood forest products for household income in rural area of Sudan–A review. *Journal of Agriculture and Food Research*, *14*, 100801. https://doi.org/10.1016/j.jafr.2023.100801

Mwamatope, B., Chikowe, I., Tembo, D. T., Kamanula, J. F., Masumbu, F. F., & Kumwenda, F. D. (2023). Phytochemical composition and antioxidant activity of edible wild fruits from Malawi. *BioMed Research International*, *2023*(1), 2621434. https://doi.org/10.1155/2023/2621434

Navia, Z. I., Suwardi, A. B., Harmawan, T., Syamsuardi, S., & Mukhtar, E. (2020). The diversity and contribution of indigenous edible fruit plants to the rural community in the Gayo Highlands, Indonesia. *Journal of Agriculture and Rural Development in the Tropics and Subtropics (JARTS)*, *121*(1), 89-98. https://doi.org/10.17170/kobra-202004061145

Nawrot, K., Polak-Szczybyło, E., & Stępień, A. (2022). Characteristics of the health-promoting properties of *Cornus mas*. *European Journal of Clinical and Experimental Medicine*, (2), 217-223. https://doi.org/10.15584/ejcem.2022.2.11

Nishimwe, G., Dahlin, A. S., Niyitanga, F., & Augustino, S. (2024). Domestication of wild indigenous fruit trees in Rwanda: Perspectives from rural communities. *Trees, Forests and People*, *17*, 100624. https://doi.org/10.1016/j.tfp.2024.100624

Ousaaid, D., Laaroussi, H., Kamari, F. E., Lyoussi, B., & Arabi, I. E. (2025). Phytoactive compounds, chemical and biological functionalities of *Rosa canina* L.: a review. *Discover Plants*, *2*(1), 258. https://doi.org/10.1007/s44372-025-00293-2

Pawera, L., Khomsan, A., Zuhud, E. A., Hunter, D., Ickowitz, A., & Polesny, Z. (2020). Wild food plants and trends in their use: From knowledge and perceptions to drivers of change in West Sumatra, Indonesia. *Foods*, *9*(9), 1240. https://doi.org/10.3390/foods9091240

Peña, F., Valencia, S., Tereucán, G., Nahuelcura, J., Jiménez-Aspee, F., Cornejo, P., & Ruiz, A. (2023). Bioactive compounds and antioxidant activity in the fruit of rosehip (*Rosa canina* L. and *Rosa rubiginosa* L.). *Molecules*, *28*(8), 3544. https://doi.org/10.3390/molecules28083544

Punchay, K., Inta, A., Tiansawat, P., Balslev, H., & Wangpakapattanawong, P. (2020). Traditional knowledge of wild food plants of Thai Karen and Lawa (Thailand). *Genetic Resources and Crop Evolution*, *67*(5), 1277-1299. https://doi.org/10.1007/s10722-020-00910-x

Radbeh, Z., Asefi, N., Hamishehkar, H., Roufegarinejad, L., & Pezeshki, A. (2020). Novel carriers ensuring enhanced anti-cancer activity of *Cornus mas* (cornelian cherry) bioactive compounds. *Biomedicine & Pharmacotherapy*, *125*, 109906. https://doi.org/10.1016/j.biopha.2020.109906

Saensouk, P., Saensouk, S., Boonma, T., Junsongduang, A., Naing, M. K., & Jitpromma, T. (2025). Ethnomedicinal Properties of Wild Edible Fruit Plants and Their Horticultural Potential Among Indigenous Isan Communities in Roi Et Province, Northeastern Thailand. *Horticulturae*, *11*(8), 885. https://doi.org/10.3390/horticulturae11080885

Sahoo, G., Swamy, S. L., Rout, S., Wani, A. M., & Mishra, A. (2021). Exploitation of wild leafy vegetables and under-utilized fruits: consequences for food and nutritional security. *Annals of the Romanian Society for Cell Biology*, *25*(6), 5656-5668.

Salami, S. O., Adegbaju, O. D., Idris, O. A., Jimoh, M. O., Olatunji, T. L., Omonona, S., Orimoloye, I. R., Adetunji, A. E., Olusola, A., Maboeta, M. S., & Laubscher, C. P. (2022). South African wild fruits and vegetables under a changing climate: The implications

on health and economy. *South African Journal of Botany*, *145*, 13-27. https://doi.org/10.1016/j.sajb.2021.08.038

Sardeshpande, M., & Shackleton, C. (2023). Fruits of the city: The nature, nurture and future of urban foraging. *People and Nature*, *5*(1), 213-227. https://doi.org/10.1002/pan3.10428

Semwal, P., Painuli, S., Jamloki, A., Rauf, A., Rahman, M. M., Olatunde, A., Hemeg, H. A., Abu-Izneidh, T., Naz, S., Bangar, S. P., Lorenzo, J. M., & Simal-Gandara, J. (2023). Himalayan wild fruits as a strong source of nutraceuticals, therapeutics, food and nutrition security. *Food Reviews International*, *39*(9), 6500-6536. https://doi.org/10.1080/87559129.2022.2121407

Stadlmayr, B., Trübswasser, U., McMullin, S., Karanja, A., Wurzinger, M., Hundscheid, L., Riefler, P., Lemke, S., Brouwer, I. D., & Sommer, I. (2023). Factors affecting fruit and vegetable consumption and purchase behavior of adults in sub-Saharan Africa: A rapid review. *Frontiers in Nutrition*, *10*, 1113013. https://doi.org/10.3389/fnut.2023.1113013

Stamin, F. D., & Cosmulescu, S. N. (2024a). Morphological variability of some rosehip fruits (*Rosa canina* L.) from the spontaneous flora of Olt County, Romania. *Scientific Papers. Series B. Horticulture*, *68*(1).

Stamin, F. D., & Cosmulescu, S. N. (2024b). Wild fruits–A review of food and medical importance. *Annals of the University of Craiova, Biology, Horticulture, Food products processing technology, Environmental engineering*, *29*(65). https://doi.org/10.52846/bihpt.v29i65.181

Stamin, F. D., & Cosmulescu, S. N. (2025). Population estimates for some spontaneous fruit species in forest ecosystems located in Southern Romania. *Annals of the University of Craiova, Biology, Horticulture, Food products processing technology, Environmental engineering*, *30*(66). https://doi.org/10.52846/bihpt.v30i66.288

Stamin, F. D., Vijan, L. E., Topală, C. M., & Cosmulescu, S. N. (2024). The influence of genotype, environmental factors, and location on the nutraceutical profile of *Rosa canina* L. fruits. *Agronomy*, *14*(12), 2847. https://doi.org/10.3390/agronomy14122847

Suwardi, A. B., & Mukhtar, E. (2023). The diversity and traditional knowledge of wild edible fruits in Bengkulu, Indonesia. *Ethnobotany Research and Applications*, *25*, 1-17. http://dx.doi.org/10.32859/era.25.15.1-17

Suwardi, A. B., Navia, Z. I., Harmawan, T., Syamsuardi, S., & Mukhtar, E. (2020). Wild edible fruits generate substantial income for local people of the Gunung Leuser National Park, Aceh Tamiang Region. *Ethnobotany research and applications*, *20*, 1-13. http://dx.doi.org/10.32859/era.20.11.1-13

Tafreshi, Y. M., Eghlima, G., Hatami, M., & Vafadar, M. (2025). Exploring the potential impact of salicylic acid and jasmonic acid in promoting seed oil content, vitamin C and antioxidant activity in rosehip (*Rosa canina* L.). *BMC Plant Biology*, *25*(1), 249. https://doi.org/10.1186/s12870-025-06251-0

Tamayo-Vives, C., García-Herrera, P., Sánchez-Mata, M. C., Cámara-Hurtado, R. M., Pérez-Rodríguez, M. L., Aceituno, L., Pardo-de-Santayana, M., Dias, M. I., Barros, L., & Morales, P. (2023). Wild fruits of *Crataegus monogyna* Jacq. and *Sorbus aria* (L.) Crantz: from traditional foods to innovative sources of pigments and antioxidant ingredients for food products. *Foods*, *12*(12), 2427. https://doi.org/10.3390/foods12122427

Tiboni, M., Coppari, S., Casettari, L., Guescini, M., Colomba, M., Fraternale, D., Gorassini, A., Verardo, G., Ramakrishna, S., Guidi, L., Di Giacomo, B., Mari, M., Molinaro, R., & Albertini, M. C. (2020). *Prunus spinosa* extract loaded in biomimetic nanoparticles evokes in vitro anti-inflammatory and wound healing activities. *Nanomaterials*, *11*(1), 36. https://doi.org/10.3390/nano11010036

Ul Abidin, S. Z., Khan, R., Ahmad, M., Cuerrier, A., Zafar, M., Ullah, A., Khan, J., Saeed, A., Al-Qahtani, W. H., & Kazi, M. (2023). Wild edible fruits as a source of food and medicine: a study among tribal communities of Southern Khyber Pakhtunkhwa. *Plants*, *13*(1), 39. https://doi.org/10.3390/plants13010039

Wahabi, S., Rtibi, K., Abidi, C., Jridi, M., Gressier, B., Sebai, H., & Eto, B. (2025). Impact of Wild Edible Fruits of Arbutus unedo and *Crataegus monogyna* on Gut Motility, Contraction, Secretion, and Glucose Regulation. *Neurogastroenterology & Motility*, *37*(12), e70189. https://doi.org/10.1111/nmo.70189

Wertheim-Heck, S. C., & Raneri, J. E. (2020). Food policy and the unruliness of consumption: An intergenerational social practice approach to uncover transforming food consumption in modernizing Hanoi, Vietnam. *Global Food Security*, *26*, 100418. https://doi.org/10.1016/j.gfs.2020.100418

Wilk, M., Seruga, P., & Nowicka, P. (2025). Effect of Processing Parameters on the Content of Bioactive Compounds of *Prunus spinosa* L. Fruit Tinctures. *Foods*, *14*(18), 3200. https://doi.org/10.3390/foods14183200

Yangdon, P., Araki, T., Rahayu, Y. Y. S., & Norbu, K. (2022). Ethnobotanical study of wild edible fruits in eastern Bhutan. *Journal of Ethnobiology and Ethnomedicine*, *18*(1), 27. https://doi.org/10.1186/s13002-022-00526-8

Yobo, C. M., Iponga, D. M., Tieguhong, J. C., Bengone, N. N., & Ngoye, A. (2020). Exploring gender dynamics, economics and perceptions of the vulnerability of the bush mango value chain in three provinces of Gabon. *International Forestry Review*, *22*(3), 354-369. https://doi.org/10.1505/146554820830405654