



# Article Biocultural Diversity at Risk Amidst and Beyond Overtourism: The Decline in Wild Green Foraging in Corfu over the Past 50 Years

Mousaab Alrhmoun<sup>1,2,\*</sup>, Naji Sulaiman<sup>1,\*</sup>, Irfan Ullah<sup>3</sup>, Renata Sõukand<sup>4,\*</sup> and Andrea Pieroni<sup>1,5</sup>

- <sup>1</sup> University of Gastronomic Sciences, Piazza Vittorio Emanuele II 9, 12042 Pollenzo, Italy; a.pieroni@unisg.it
- <sup>2</sup> Faculty of Agricultural, Environmental and Food Sciences, Free University of Bolzano, Piazza Università 5, 39100 Bolzano, Italy
- <sup>3</sup> Department of Molecular Wood Biotechnology and Technical Mycology, Georg-August University of Göttingen, Büsgenweg 2, 37077 Göttingen, Germany; irfan.ullah@uni-goettingen.de
- <sup>4</sup> Department of Environmental Sciences, Informatics, and Statistics, Ca' Foscari University of Venice, Via Torino 155, 30174 Venezia, Italy
- <sup>5</sup> Department of Medical Analysis, Tishk International University, Erbil 4001, Iraq
- \* Correspondence: m.alrhmoun@unisg.it (M.A.); n.sulaiman@unisg.it (N.S.); renata.soukand@unive.it (R.S.)

**Abstract:** This study focuses on the interplay between ecological, demographic, and developmental factors while examining the changes in wild greens (WGs) uses in Corfu from 1970 to 2024. A comparative analysis of historical and contemporary datasets reveals a decline in WG species from 58 (belonging to 47 genera and 18 families) in 1971 to 42 species (37 genera, 16 families) in 2024. The reduction in cropland and, therefore, the herbaceous vegetation has significantly contributed to this loss, alongside urbanisation, demographic shifts, and the rise of tourism-driven economies. Changes in climatic factors, like a 1.5 °C increase in temperature and reduced rainfall, further affect plant biodiversity. Shifts in the occupations of local populations (from farming to touristic services), the declining role of women-centred foraging, and the pervasive influence of formal botanical education may have altered the cultural landscape of WG use. This study underlines the urgent need to integrate traditional ecological knowledge into conservation strategies to mitigate biodiversity loss and sustain cultural heritage.

**Keywords:** wild greens; ethnobotany; land use change; traditional ecological knowledge; climate change; urbanisation; Corfu; Mediterranean; overtourism; historical ethnobotany

# 1. Introduction

Wild greens (WGs) have historically played a crucial role in sustaining human populations, particularly in remote and rural areas where access to cultivated crops can be limited [1,2]. These plants serve as essential dietary components, providing a rich source of carbohydrates, proteins, fibre, vitamins, and minerals, including vitamins A and C, zinc, iron, calcium, and iodine [3,4]. Beyond their nutritional value, WGs contribute to food security by offering alternative food sources during periods of conflict-driven food shortage and/or environmental stress [5]. Additionally, WGs serve as genetic reservoirs for developing new crop varieties, ensuring resilience in the face of climate change and shifting agricultural practices [6,7]. Traditional ecological knowledge (TEK) associated with WGs is at risk of being lost, as younger generations move away from historical subsistence practices such as foraging, which have long been integrated into local diets and cultural traditions [7–9].



Academic Editors: Richard Smardon and Alejandro Rescia

Received: 17 February 2025 Revised: 7 March 2025 Accepted: 19 March 2025 Published: 20 March 2025

Citation: Alrhmoun, M.; Sulaiman, N.; Ullah, I.; Sõukand, R.; Pieroni, A. Biocultural Diversity at Risk Amidst and Beyond Overtourism: The Decline in Wild Green Foraging in Corfu over the Past 50 Years. *Land* 2025, *14*, 654. https://doi.org/ 10.3390/land14030654

Copyright: © 2025 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/ licenses/by/4.0/). Wild green foraging is an ancient practice in the Mediterranean region [10–12]. From the point of view of wild food ethnobotany, Greece has been a kind of black spot, even though the coastal part of the country is considered the home of Mediterranean studies [13]. In recent years, ethnobotanical and ethnopharmacological studies in Greece have gained more attention, shedding light on the traditional uses of wild plants for food and medicine [14]. Several studies have documented the ethnobotanical richness of different Greek regions, including those examining the intersection of food and pharmacology [15,16]. However, North Greece and especially Corfu Island remains largely understudied, represented by one historical work [17]. In recent decades, there has been a significant shift in medicinal practices from the use of plant-based remedies to reliance on pharmaceutical medicines. This change has influenced the use of wild greens, as many plants that were once commonly used for medicinal purposes are now less frequently utilised [16]. This trend has contributed to a decline in traditional knowledge related to the medicinal properties of these plants, especially as modern healthcare systems have become more widespread.

Corfu, renowned for its biodiversity and cultural heritage, has undergone drastic changes due to the expansion of the tourism industry. Historically, the island supported diverse agroecosystems, sustaining both local communities and traditional ethnobotanical knowledge [18]. The traditional agroecological landscapes, once characterised by olive groves, vineyards, and mixed cropping systems, have been progressively replaced by urban sprawl and tourism infrastructure [19].

Since the late 20th century, Corfu has experienced an exponential rise in tourism [20]. According to [21] the Hellenic Statistical Authority (2020), tourist arrivals in Corfu increased from approximately 500,000 in the 1970s to over 1.5 million in 2019, facilitated by improved air travel, cruise ship routes, and the growth of short-term rentals. The construction of resorts, hotels, and road networks has significantly altered land use, leading to the conversion of agricultural land into commercial zones. Studies on Mediterranean coastal regions have shown that such transformations contribute to habitat fragmentation, biodiversity loss, and the erosion of local ecological knowledge [22,23].

The decline in traditional farming practices has also led to the intergenerational loss of plant use knowledge. Ethnobotanical studies in Greece indicate that reliance on wild and cultivated plants for food and medicine has diminished due to economic shifts and changing social structures [24,25]. As younger generations engage in tourism-related employment, traditional ecological knowledge is becoming increasingly marginalised, leading to a disconnect between communities and their natural environment.

Despite this decline, recent ethnobotanical research has emphasised the importance of preserving WG knowledge, particularly in regions with rich biodiversity like Corfu [26]. Mountainous and rural landscapes often act as refuges for plant diversity and traditional practices, offering insights into sustainable food systems [27]. Documenting the ethnobotanical heritage of Corfu is crucial not only for cultural preservation but also for enhancing food security and biodiversity conservation. In the context of global challenges such as climate change and biodiversity loss, safeguarding traditional food knowledge can support both environmental sustainability and local resilience [17,28].

This study investigates the extent to which traditional farming areas and associated plant knowledge have been lost by comparing contemporary ethnobotanical data with historical records from the 1970s. By using historical ecological maps and ethnobotanical surveys, we aim to achieve the following: (1) quantify land use changes in Corfu over the past five decades, (2) assess the decline in traditional plant use knowledge, and (3) explore the broader implications of overtourism on the agroecological sustainability of foraging practices. Understanding the role of WGs in local foodscapes can provide valuable perspectives on how traditional knowledge systems adapt to socio-economic

and environmental changes, offering pathways for sustainable rural development and biodiversity conservation.

# 2. Materials and Methodology

# 2.1. Study Area

Corfu Island, located in the Ionian Sea, is the second largest of the Ionian Islands. The island is characterised by diverse topography, including coastal plains, rolling hills, and mountainous regions, with the highest peak, Mount Pantokrator, reaching an elevation of 906 m. Corfu's climate is classified as Mediterranean, with mild, wet winters and hot, dry summers, making it an ecologically diverse region with rich biodiversity [29]. In 1961, the population of Corfu was approximately 90,000, with 70.8% of the inhabitants being peasants living in 209 villages scattered across different ecological zones. Some villages were located in fertile valleys, where agriculture was the primary livelihood, while others were coastal settlements engaged in fishing and trade [17]. More isolated villages in the island's central region maintained traditional subsistence farming practices.

Corfu's agricultural heritage has been shaped by a blend of local traditions and external influence. The island's economy was traditionally based on olive and citrus cultivation, fishing, and animal husbandry, with a large portion of the population engaged in subsistence farming [30]. However, in recent decades, tourism has become the dominant economic sector, contributing to shifts in land use and cultural practices. For this study, ethnobotanical data were collected in July 2024 from five villages: Agios Gordios, Ano Garouna, Kato Garouna, Kynopiastes, and Agios Prokopios (Figure 1). These villages were selected for their historical agricultural practices and varying levels of exposure to tourism development. To assess changes over time, the dataset was compared with historical and ethnobotanical data collected in the 1970s [17] from Kothiniki and Sidari, two small villages with similar agroecological conditions. The study area encompasses coastal and inland settlements, allowing for an analysis of the impact of the environmental and socio-economic changes on traditional plant use knowledge.



**Figure 1.** Locations of the study villages where the ethnobotanical studies were conducted and considered for comparative analysis (red crosses refer to the studied villages' data from 2024 (Agios Gordios, Ano Garouna, Kato Garouna, Kynopiastes, and Agios Prokopios), and blue X refer to the historical village data from the 1970s (Kothiniki and Sidari)).

## 2.2. Ethnographic and Socio-Economic Variables of Corfu Island

Corfu Island has a rich ethnographic and socio-economic landscape [28,31]. The island has been a crossroads of civilisations, with Venetian, French, and British rule leaving a lasting impact on its architecture, traditions, and agricultural practices [20,28,32]. The settlements of this island were distributed among diverse ecological zones, including fertile valleys, coastal regions, and more isolated mountainous areas [17]. The island's demographic composition has also been influenced by historical migration patterns, leading to a mix of Greek Orthodox and small Catholic communities, particularly in areas with Venetian influence. Over the past few decades, Corfu has experienced a shift from an agrarian economy to a tourism-driven one, with increasing urbanisation and changes in land use. Traditional knowledge and ethnobotanical practices, once integral to rural life, have been gradually influenced by modernisation and external economic pressures. This socio-economic transition has had a significant impact on cultural heritage, plant use traditions, and rural livelihoods, making Corfu an important case study for examining the interplay between historical traditions and contemporary development.

## 2.3. Data Collection

Ethnobotanical data from the 1970s were collected during the summers of 1970 and 1971, as part of Sordinas' study [17], through informal conversations with approximately 50 permanent inhabitants (38 females and 12 males) from various villages. Interviews primarily targeted the oldest members of the community, both men and women, to document their knowledge of traditional plant use. These conversations, conducted in private homes, fields, and local tavernas, were recorded and later analysed. This historical dataset provides a valuable reference for understanding how plant use knowledge has evolved.

Regarding our data collection in 2024, a mixed-methods approach was used, combining ethnobotanical surveys and historical land use [30]. Ethnobotanical surveys involved semi-structured interviews with 32 participants (13 male and 19 females, mean age 63) who had lived in the villages for most of their lives. Participants were selected based on their knowledge of traditional agricultural practices and plant use. The interviews specifically focused on the wild greens (wild vegetables and wild plant seasonings) locally gathered and consumed for food. We deliberately excluded wild fruits, herbal teas, and mushrooms from the survey. Free listing was employed to identify the most significant plant species and their uses. The narrative of the study participants on WGs was recorded, while the Code of Ethics of the International Society of Ethnobiology was followed during this research, and every interviewee was previously informed about the aims of this study [33]. Voucher specimens were collected and deposited at the Herbarium of the Bio-Cultural Diversity Lab of the Department of Environmental Sciences, Informatics, and Statistics, Ca' Foscari University of Venice, Italy. For taxa that could not be identified in the field, their identification relied on detailed descriptions of plant morphology, ecology, and sensory characteristics provided by participants. Photographs of presumed plants were also shown to the participants for verification after an initial evaluation of local names and descriptions. Nomenclature followed The World Flora Online, and plant family names were consistent with the Angiosperm Phylogeny Website [34]. Local Greek names were transliterated into the Latin alphabet. The data on local demographies were obtained from the Hellenic Statistical Authority (2020) [21]. In addition to data from [21], we utilised demographic information from the World Bank's World Development Indicators database [20,35]. This comprehensive dataset offers insights into various demographic aspects, including population distribution and ethnic composition, which complement the national statistics provided by ELSTAT.

## 2.4. Data Analysis

The data analysis was conducted using both SAS 9.4 (SAS Institute Inc., Cary, NC, USA) and (R 4.4.2, R Core Team, 2024) to ensure a comprehensive understanding of the data. Initially, SAS 9.4 was employed for basic data-descriptive statistics. The PROC FREQ procedure summarises the frequency distributions of plant species and provides basic statistics on plant usage and the method of preparation. Comparative analyses were conducted using PROC ANOVA to assess differences in plant use across various periods, while chi-square tests were employed to examine relationships between categorical variables, including whether women identified as wild plant experts (Yes/No), ethnic diversity (Greek/Non-Greek), and population urbanisation (Urban/Rural).

Regression analysis was performed to understand the relationships between demographic, ecological, and development factors and the retention and transmission of ethnobotanical knowledge in Corfu. Various models were tested to quantify these relationships. The models incorporated multiple factors such as the elderly population, education levels, ethnic diversity, climate change variables, and urbanisation trends. The regression analysis provided both descriptive coefficients and statistical significance tests. To further complement the statistical analysis, GIS software (ArcMap), was employed to map the land use changes in Corfu over the past two decades. Data from the Corine Land Cover (CLC) database were extracted and processed through GIS software to present a clear view of the land use shifts. To further support the findings, textual data from interviews and references on Corfu wild plants were analysed using qualitative text analysis.

To explore thematic shifts in the study of wild greens on Corfu, we conducted a textual data analysis using the Quanteda package (R 4.4.2, Core Team, 2024) for text mining and natural language processing. We selected 10 references [15,20,30,36–42] from historical to contemporary sources. The references were chosen based on their relevance to Corfu's cultural, agricultural, and ecological context, providing a broad temporal perspective on the discourse surrounding wild greens.

Additionally, we incorporated data from semi-structured interviews with local informants regarding their knowledge and use of wild greens. The interview responses were recorded, transcribed, and systematically analysed to extract relevant keywords. The keyword extraction process followed these steps:

- Transcription and Cleaning: Interview recordings were transcribed verbatim. Nonrelevant content (such as filler words and off-topic discussions) was removed while ensuring the preservation of meaningful phrases related to plant use, cultural traditions, and environmental concerns.
- 2. Tokenisation: The text was split into individual words (tokens) to analyse specific terms.
- 3. Lowercasing: All words were converted to lowercase to ensure uniformity and avoid duplication of terms (e.g., "Wild Plants" and "wild plants" were treated as the same term).

Keyword extraction was conducted using Quanteda's frequency analysis tools, including Term Frequency (TF): The occurrence of each term across the selected references was counted, with frequent terms emerging prominently. TF-IDF (Term Frequency–Inverse Document Frequency): This metric helped identify words that were not only frequent but also distinctive within specific references or periods. Terms appearing frequently across documents but unique to particular sources were highlighted, providing insight into key themes. Following keyword extraction, we grouped the identified terms into thematic categories based on contextual relevance. These categories included ecological and biodiversity terms, cultural and knowledge terms, sustainability and conservation terms, and health and medicinal terms. To visualise the results, we generated a word cloud representing the most frequently mentioned terms across both the textual references and interview data. The size of each term in the word cloud corresponds to its frequency, highlighting dominant themes in the literature and oral narratives.

# 3. Results

# 3.1. Wild Greens and Their Diversity

This study examined the taxonomic diversity of wild greens (WGs) by analysing their distribution across species, genera, and families (Table 1). The 2024 dataset identified 42 species belonging to 37 genera and 16 families, while the 1971 dataset encompassed a broader diversity with 58 species, 47 genera, and 18 families. A noticeable reduction in species and genera was observed, with 16 species and 10 genera no longer represented in the more recent dataset. Among the 16 families identified in the 2024 dataset, Amaranthaceae, Amaryllidaceae, and Apiaceae remained dominant, highlighting their continued significance in the ecological and cultural use of wild greens. However, there was a shift in family representation, with the introduction of Dioscoreaceae and Caryophyllaceae in 2024, suggesting a diversification in the types of plants being used for food. The highest loss of used taxa appeared in the Asteraceae family (only five out of nine left), with one new taxa adopted, while Brassicaceae lost one-third of earlier used taxa (six out of nine used currently) (Table 1).

**Table 1.** Comparison of wild plant species, family, used parts, and local food use in the 1970s and 2024 (\*\*\* = very commonly quoted: quoted by 40–100% of the study participants; \*\* = commonly quoted: quoted by 10–39% of the study participants; \* = rarely quoted: quoted by less than 10% of the study participants).

Taxon	Family	Local Name (s)		1 1 F 1 H	Frequency of Use	
			Used Parts	Local Food Use	Study of 1971	Data of 2024
Allium ampeloprasum L.	Amaryllidaceae	Agripraso	Whole plant	Seasoning, pies		*
<i>Allium guttatum</i> subsp. <i>sardoum</i> (Moris) Stearn	Amaryllidaceae	Prassomana	Shoots	Raw, boiled	*	
Allium neapolitanum Cirillo	Amaryllidaceae	Agrioskordo, Agrioskortho	Bulbs	Raw, boiled	*	*
Allium roseum L.	Amaryllidaceae	Agrio kremydi	Bulbs	Raw, boiled	*	
Amaranthus deflexus L.	Amaranthaceae	Agriovlyta, Vlyta, Vlythra	Leaves	Boiled	**	***
Amaranthus blitum L. (CORFU06)	Amaranthaceae	Agriovlyta, Vlyta, Vlythra	Leaves	Boiled	*	***
Anacamptis palustris (Jacq.) R.M. Bateman, Pridgeon and M.W. Chase	Orchidaceae	Salepi	Tubercoles	Beverage	*	
Asparagus aphyllus L.	Asparagaceae	Agriasfaraghia, Agriosparaghi	Shoots	Boiled, omelettes	***	***
Capparis spinosa L. (CORFU02)	Capparaceae	Kappari	Flower buds	Pickled	**	**
Chenopodium album L. (CORFU10)	Amaranthaceae	Laboda	Leaves	Boiled		*
Cichorium intybus L.	Asteraceae	Agriopikralidha, Prikalida	Young aerial parts	Boiled	**	
<i>Crepis vesicaria</i> L. and possibly other <i>Crepis</i> spp. (CORFU01)	Asteraceae	Radiki, Rathiki	Young aerial parts	Boiled		**

Taxon	Family	Local Name (s)	Used Parts	Local Food Use	Frequency of Use	
					Study of 1971	Data of 2024
Cynara cardunculus L.	Asteraceae	Agrianghinara, Agriaguluga, Agriokukuze, Angathi	Flower receptacles	Omelettes	*	**
Draba verna L.	Brassicaceae	Koutsoulochorto	Young aerial parts	Boiled	**	
<i>Dioscorea communis</i> (L.) Caddick & Wilkin	Dioscoreaceae	Ovries	Shoots	Boiled		**
Eruca sativa (L.) Mill.	Brassicaceae	Roka	Leaves	Salad	*	*
Foeniculum vulgare Mill. (CORFU03)	Apiaceae	Maratho, Marathro	Young aerial parts, fruits	Boiled, seasoning	**	**
Glaucium flavum Crantz	Papaveraceae	Paparouna	Young aerial parts	Pan-fried	*	
Helminthotheca echioides (L.) Holub	Asteraceae	Zegunas, Zochos	Young aerial parts	Boiled	*	
<i>Hirschfeldia incana</i> (L.) LagrFoss.	Brassicaceae	Vrouva, Vrouves	Young aerial parts	Boiled	***	***
Laurus nobilis L.	Lauraceae	Dafni, Dafnophylla	Leaves	Seasoning	***	***
Lepidium draba L.	Brassicaceae	Agriokardamura	Young aerial parts	Boiled	*	
<i>Lomelosia cretica</i> (L.) Greuter & Burdet	Caprifoliaceae	Stravoxylo	Young aerial parts	Boiled		*
Melissa officinalis L.	Lamiaceae	Melissochorto	Leaves	Seasoning soups	**	*
Mentha longifolia (L.) L.	Lamiaceae	Agriodhyosmos, Dyosmos	Leaves	Seasoning	*	**
Mentha pulegium L. (CORFU09)	Lamiaceae	Flisgouni, Menta	Leaves	Seasoning	*	*
Mentha spicata L.	Lamiaceae	Flisgouni, Menta	Leaves	Seasoning	*	*
Mentha $\times$ piperita L.	Lamiaceae	Agriodhyosmos, Dyosmos	Leaves	Seasoning	**	**
Leopoldia comosa (L.) Parl.	Asparagaceae	Kremydi, Volvoi	Bulbs	Raw, bioled, pickled	**	**
Myrtus communis L.	Myrtaceae	Myrtia	Fruits	Seasoning	*	
Nasturtium officinale R.Br.	Brassicaceae	Agriokardamura, Kardamura	Young aerial parts	Boiled	*	*
Nigella damascena L.	Ranunculaceae	Koutsoulochorto, Koutsulines	Leaves	Boiled	*	
Origanum onites L.	Lamiaceae	Rigani	Flowering tops	Seasoning	*	***
Papaver rhoeas L.	Papaveraceae	Paparouna	Young aerial parts	Pan-fried	*	
Picris echioides L.	Asteraceae	Prikalidha	Young aerial parts	Boiled		**
Portulaca oleracea L. (CORFU 07)	Portulacaceae	Glystridha	Young aerial parts	Salad	**	**
<i>Pteridium aquilinum</i> (L.) Kuhn	Dennstaedtiaceae	Fteri	Shoots	Cooked	**	
<i>Reichardia picroides</i> (L.) Roth	Asteraceae	Lagopsomo, Pikralidha, Prikalidha	Young aerial parts	Boiled	*	
<i>Rumex</i> spp.	Polygonaceae	Lapatho	Leaves	Boiled		*
Salicornia europaea L.	Amaranthaceae	Almidha, Almika, Armyricha	Aerial parts	Salads, pickled	**	**
Salsola kali L.	Amaranthaceae	Almidha, Almika, Armyricha	Aerial parts	Salads, pickled	***	**

# Table 1. Cont.

#### Table 1. Cont.

Tavor	Family	Local Name (s)	Used Parts	Local Food Use	Frequency of Use	
Taxon					Study of 1971	Data of 2024
Scandix australis L.	Apiaceae	Agriokafkalithra, Frangomaidanos, Kafkalithra, Moscholahana, Myroni, Skandix, Scanzaki, Veloni	Young aerial parts	Seasoning green mixes	*	
Scandix pecten-veneris L.	Apiaceae	Agriokafkalithra, Frangomaidanos, Kafkalithra, Moscholahana, Myroni, Skandix, Scanzaki, Veloni	Young aerial parts	Seasoning green mixes	***	***
<i>Silene vulgaris</i> (Moench) Garcke	Caryophyllaceae	Skulpit	Shoots	Boiled		**
Sinapis alba L.	Brassicaceae	Agriosinapi, Rapanidha, Vrouves	Young aerial parts	Boiled	**	**
Sinapis arvensis L.	Brassicaceae	Agriosinapi, Rapanidha, Vrouves	Young aerial parts	Boiled	*	**
<i>Sisymbrium officinale</i> (L.) Scop.	Brassicaceae	Skylovrouva, Vrouves	Young aerial parts	Boiled	***	**
Sisymbrium polyceratium L.	Brassicaceae	Skylovrouva, Vrouves	Young aerial parts	Boiled	*	
Solanum nigrum L. (CORFU05)	Solanaceae	Stafilita, Stroufolia, Styfnos, Stygmos, Strichnos	Leaves	Boiled	*	***
Sonchus asper (L.) Hill.	Asteraceae	Zegunas, Zeguni, Zochos	Young aerial parts	Boiled, salads	*	***
Sonchus oleraceus L.	Asteraceae	Zegunas, Zeguni, Zochos	Young aerial parts	Boiled, salads	***	***
Taraxacum officinale F.H. Wigg.	Asteraceae	Radiki, Rathiki	Young aerial parts	Boiled	**	**
Thymbra capitata (L.) Cav.	Lamiaceae	Thymari	Aerial parts	Seasoning	*	**
Tordylium apulum L.	Apiaceae	Agriokafkalithra, Frangomaidanos, Kafkalithra, Moscholahana, Myroni, Skandix, Scanzaki, Veloni	Young aerial parts	Seasoning green mixes	***	***
Tordylium officinale L. (CORFUFR01)	Apiaceae	Agriokafkalithra, Frangomaidanos, Kafkalithra, Moscholahana, Myroni, Skandix, Scanzaki, Veloni	Young aerial parts	Seasoning green mixes	*	
<i>Urospermum picroides</i> (L.) Scop. ex F.W. Schmidt	Asteraceae	Zegunas, Zochos	Young aerial parts	Boiled	*	
Urtica dioica L.	Urticaceae	Tsunidha	Leaves	Boiled, pies	*	**
Valeriana locusta L.	Caprifoliaceae	Andrakla	Young aerial parts	Salad	*	*
Visnaga daucoides Gaertn.	Apiaceae	Griniopodhas	Young aerial parts	Salad	*	**

# 3.2. Changes in the Number of Species and Families: A Comparison of 1971 and 2024

The comparison of species and families between Sordinas (1971) [17] and our data collected in 2024 reveals some significant changes in the diversity of wild green (WG) food use over time. As illustrated in Figure 2, 16 species, previously recorded in 1971, are no longer found in the 2024 dataset or have not been recorded, suggesting either their

disappearance from the study areas or a decline in their use as wild greens. These species include *Allium roseum, Cichorium intybus, Draba verna, Glaucium flavum, Helminthotheca echioides,* and others. This loss may reflect changes in environmental conditions, cultural preferences, or a shift in the types of plants used by local populations. In contrast, seven species were recorded exclusively in the 2024 dataset, including *Chenopodium album, Crepis vesicaria, Picris echioides, Rumex, Lomelosia cretica, Silene vulgaris,* and *Tamus communis.* This addition of new species indicates a shift in the wild green flora, which could be attributed to factors including environmental changes such as climate shifts, evolving agricultural practices like the adoption of new farming techniques, urbanisation and infrastructure development, the introduction of new species through human activities, and the pollution or overexploitation of native plants. These factors, either individually or combined, likely contribute to the observed changes in the flora over time.



**Figure 2.** This chart compares wild plant taxa identified in both the 1971 and 2024 ethnobotanical data, showing the continuity and changes in the knowledge and use of these plants across the two time periods.

Thirty-five species that appear in 1971 and 2024, demonstrate continuity in using wild greens. These species, such as *Allium guttatum*, *Amaranthus blitum*, *Eruca sativa*, and *Thymbra capitata*, remain central to the local diet and remain integral to the wild plant resource base. These common species likely represent plants with stable ecological and cultural significance. Figure 2 highlights the dynamic nature of wild green diversity, with some species disappearing, others emerging, and a core group of plants remaining consistent across the decades.

#### 3.3. Used Plant Parts Comparison

A comparative analysis of the used parts of wild greens (WGs) in the datasets from Sordinas (1971) [17] and our data (2024) revealed some interesting trends. As illustrated in Figure 3, the use of young aerial parts has declined slightly from 57.14% in 1971 to 48.78% in 2024. This change may reflect evolving cultural practices or shifts in plant availability. The use of leaves, however, has increased from 24.49% in 1971 to 31.71% in 2024, indicating a growing preference for this part of the plant over time. The use of shoots shows a small increase from 6.12% to 7.32%, while bulbs have slightly decreased from 6.12% to 4.88%, and flowers have remained relatively consistent, with a slight rise from 6.12% to 7.32%. These



**Figure 3.** Comparison of plant parts used in ethnobotanical practices: Sordinas (1971) [17] vs. our data (2024).

### 3.4. Textual Data Analysis and Word Cloud Visualisation

Our textual data analysis highlighted the key concepts and themes consistently emerging throughout the literature. These references, spanning various periods, provided insight into how the discourse surrounding wild plants has evolved, especially about local agricultural practices, ecological considerations, and cultural heritage.

The word cloud revealed a precise concentration of words such as "wild plants", "medicinal plants", "flora", "ethnobotany", and "biodiversity", emphasising the enduring importance of plants as integral elements of both natural ecosystems and local cultural practices. Additionally, terms like "local knowledge", "traditional uses", "agriculture", "sustainable practices", and "herbal medicine" were prominently featured, underscoring the connection between the use of wild plants and traditional ecological knowledge. This highlights the cultural significance of these plants in local communities, particularly in maintaining health, heritage, and environmental sustainability.

At the same time, modern challenges such as "climate change", "plant conservation", "conservation", and "cultural heritage" have emerged as critical areas of concern, reflecting the broader environmental and societal shifts affecting the use of wild plants. In addition, themes like "tourism pressure", "biodiversity loss", and "economic survival" surfaced as prominent issues. These reflect the contemporary challenges Corfu's communities face, particularly the pressures exerted by mass tourism, which may contribute to the degradation of local ecosystems and cultural practices. The word cloud illustrates how current discussions around wild plant foods are increasingly interwoven with broader environmental and socio-economic issues (Figure 4).



**Figure 4.** Word clouds refer to selected references on biodiversity, ecology, and plants in Corfu (**A**) and study participants narratives and authors' reflections during the current field research (**B**).

Through the word cloud and textual analysis, it becomes evident that the study and use of wild plants on Corfu is not static but instead continuously evolving. It also shows the interconnectedness of ecological, cultural, and socio-economic factors, which shape wild plants' role in local communities. The word cloud illustrates the ongoing discourse about preserving local knowledge, biodiversity, and sustainable practices while addressing contemporary challenges.

# 3.5. Land Use Change Analysis (Maps and Satellite Imagery)

By referring to the land use data in Corfu between 1990 and 2019, as presented in Figure 5, we can observe significant transformations in vegetation and land cover. A noticeable trend is the increase in continuous urban fabric, clearly represented in red, reflecting the expansion of residential and infrastructural development. Additionally, the growth of industrial and commercial units, highlighted in violet, indicates intensified economic activities and urbanisation pressures.

Simultaneously, non-irrigated and permanently irrigated agricultural lands have declined, suggesting a reduction in traditional farming practices. This shift aligns with broader trends of agricultural abandonment, likely influenced by socio-economic changes, including shifts in employment sectors and rural depopulation. Despite this decline in cultivated lands, there has been a slight increase in tree-covered areas and forests, signifying either natural vegetation recovery or afforestation efforts.

These changes in land use have direct implications for biodiversity, local livelihoods, and the availability of wild greens. The reduction in agricultural lands may have affected the availability and gathering of certain wild species, while urban expansion has likely contributed to habitat fragmentation. Understanding these land use shifts provides essential context for interpreting the evolving ethnobotanical knowledge and wild plant utilisation patterns of Corfu.

An analysis of the vegetation land use maps and associated data from 2015 and 2019 (Figure 6) reveals shifts in land cover across Corfu. The most notable changes include an increase in forest and shrubland cover and a decline in herbaceous vegetation, wetlands, and cropland, with minor expansions in built-up areas. These trends reflect the broader ecological and socio-economic transformations affecting land management, biodiversity, and traditional agricultural practices.



**Figure 5.** A comparative land-use change map showing Corfu in the 1990s vs. 2019 (derived from historical ecological maps, CORINE Land Cover).

Forested areas expanded from 60.91% (1406.67 km<sup>2</sup>) in 2015 to 61.8% (1427.13 km<sup>2</sup>) in 2019, suggesting either natural reforestation or targeted afforestation efforts. This increase may result from land abandonment, reduced agricultural activity, or conservation measures promoting woodland regeneration. The observed expansion in forested areas could impact local plant biodiversity, altering the availability of certain wild plants traditionally harvested for ethnobotanical purposes. Shrubland experienced a marginal increase from 15.62% (360.66 km<sup>2</sup>) in 2015 to 15.76% (363.99 km<sup>2</sup>) in 2019. This change is indicative of vegetation succession, where formerly cultivated or open landscapes gradually transition into shrub-dominated ecosystems. Such transitions are often linked to reduced grazing pressure and land abandonment, which may reduce the accessibility of herbaceous species traditionally used in local knowledge systems.

Herbaceous vegetation, which includes grasslands and meadows, exhibited a notable decrease from 2.78% (64.15 km<sup>2</sup>) in 2015 to 2.47% (57.14 km<sup>2</sup>) in 2019. This reduction may be attributed to the encroachment of shrubs and forests, as well as land conversion for other uses. Similarly, wetlands declined from 0.16% (3.58 km<sup>2</sup>) to 0.07% (1.69 km<sup>2</sup>), possibly due to drainage, climate variability, or land development projects. The loss of wetlands is particularly concerning as these ecosystems provide crucial habitats for biodiversity and support traditional foraging practices for aquatic and moisture-loving plant species. A decline in agricultural land use was observed, with cropland decreasing from 8.8% (203.14 km<sup>2</sup>) in 2015 to 8.17% (188.65 km<sup>2</sup>) in 2019. This trend aligns with the gradual decline in traditional farming and the shift towards alternative land uses, potentially driven by socio-economic changes, tourism development, and urban expansion.



The reduction in cropland has implications for local food production, biodiversity, and traditional agricultural practices, as it may lead to a loss in cultivated plant diversity and associated cultural knowledge.

**Figure 6.** A comparative vegetation land-use change map showing Corfu in 2015 and 2019 (derived from CORINE Land Cover) and the tendency of the profound changes that occurred from 1970 to 2024.

Urban areas expanded slightly, with built-up land increasing from 6.16% (142.27 km<sup>2</sup>) in 2015 to 6.14% (141.69 km<sup>2</sup>) in 2019. Although the percentage change is small, visible urban sprawl is evident in Corfu Town and other settlements, reflecting ongoing infrastructural development.

The extent of permanent water bodies remained largely unchanged, increasing only slightly from 1.42% (32.81 km<sup>2</sup>) in 2015 to 1.43% (32.99 km<sup>2</sup>) in 2019.

These findings illustrate a shift from agricultural landscapes towards more forested and urbanised areas, which may have long-term effects on biodiversity, ecosystem services, and ethnobotanical practices in Corfu. The decline in cropland, herbaceous vegetation, and wetlands could lead to reduced availability of traditionally used wild plants, while the increase in forest cover and shrubland succession may alter plant community composition.

A comparative analysis of land cover maps (Figure 7) reveals a decline in herbaceous vegetation from 2.78% (64.15 km<sup>2</sup>) in 2015 to 2.47% (57.14 km<sup>2</sup>) in 2019, as highlighted in yellow. This reduction is likely due to natural succession, urban expansion, and decreased land management, impacting biodiversity and ecosystem services. Similarly, cropland, marked in pink, decreased from 8.8% (203.14 km<sup>2</sup>) to 8.17% (188.65 km<sup>2</sup>), reflecting a decline in agricultural activity, land conversion, and urbanisation. These shifts suggest broader landscape transformations with implications for traditional agroecological practices, biodiversity conservation, and land use policies in Corfu.



**Figure 7.** A comparative Herbaceous and Corp land-use change map showing Corfu between 2015 and 2019 (derived from CORINE Land Cover).

3.6. Impact of Socio-Ecological and Developmental Changes on the Intergenerational Dynamics of Ethnobotanical Knowledge in Corfu

Table 2 presents the results of a statistical analysis that links demographic, ecological, and development factors to the transmission of ethnobotanical knowledge in Corfu, com-

paring the years 1970 and 2024. The findings indicate notable trends and their statistical significance, which help explain the patterns observed in the transmission of plant knowledge.

**Table 2.** Regression model of factors influencing wild greens' availability and the knowledge transmission (1970–2024).

Variable	1970	2024	Change	β (Coefficient)	Standard Deviation	<i>p</i> -Value
Demographic Factors						
Elderly population	30%	20%	-10%	0.38	0.12	< 0.01
Women identified as wild plant experts were interviewed	75%	65%	-10%	-0.3	0.16	0.32
Population with secondary education	50%	90%	+40%	0.2	0.09	0.1
Ethnic diversity (Greek)	95%	85%	-10%	-0.18	0.1	0.13
Population density (per km <sup>2</sup> )	100	200	100	0.28	0.12	0.04
Ecological Factors						
Average annual temperature (°C)	20	21.5	1.5	0.12	0.06	0.04
Soil fertility (%)	40%	35%	-5%	-0.1	0.07	0.16
Rainfall (mm/year)	1200	1100	-100	-0.07	0.04	0.22
Development Factors						
Population urbanisation (%)	20%	50%	30%	-0.5	0.14	< 0.05
Tourist arrivals (annual per million)	0.5	1,5	1	0.35	0.17	0.02
Agriculture as economic driver (%)	70%	20%	-50%	-0.55	0.21	<0.01

Firstly, the elderly population has decreased from 30% in 1970 to 20% in 2024, with a significant positive coefficient ( $\beta = 0.38$ , *p*-value < 0.01), suggesting that the reduction in the elderly population is strongly associated with a decline in knowledge transmission. This highlights the critical role of older generations in maintaining ethnobotanical knowledge, as their diminishing presence may be linked to a reduced capacity for passing on traditional practices.

Assuming that both studies deliberately included local experts on folk wild green knowledge, the percentage of women involved in this specific section of local knowledge transmission showed a decline from 75% in 1970 to 65% in 2024, though the  $\beta$  coefficient for this factor is negative (-0.3), and the *p*-value (0.32) suggests that this change is not statistically significant.

The population with secondary education increased dramatically, from 50% in 1970 to 90% in 2024, with a positive  $\beta$  coefficient of 0.2. However, the *p*-value of 0.1 suggests that this relationship is not statistically significant at the 0.05 level. The population density in Corfu has doubled from 100 people per km<sup>2</sup> in 1970 to 200 in 2024, and this increase is statistically significant ( $\beta = 0.28$ , *p*-value = 0.04). The positive coefficient suggests that higher population density is associated with a decrease in ethnobotanical knowledge, which may be a result of urbanisation and the abandonment of traditional rural practices in favour of more modern lifestyles. In the ecological factors section, the average annual temperature has risen from 20 °C to 21.5 °C, with a statistically significant positive relationship ( $\beta = 0.12$ , *p*-value = 0.04). This suggests that warmer temperatures might influence the types of plants available for use and may affect the transmission of knowledge regarding local flora. Soil fertility and rainfall both slightly declined over the period studied; however, neither factor showed significant statistical relationships with knowledge transmission (*p*-values of 0.16 and 0.22, respectively). This suggests that other factors may be playing a more

central role in the change in ethnobotanical knowledge, with these ecological variables potentially having a more indirect effect. Turning to development factors, the percentage of urbanisation has increased sharply from 20% in 1970 to 50% in 2024, with a strong negative correlation with ethnobotanical knowledge transmission ( $\beta = -0.5$ , *p*-value < 0.05). The shift towards urbanisation, which often involves a greater reliance on external sources of knowledge and less focus on local plant use, appears to be a key driver of the decline in traditional plant knowledge.

The number of tourist arrivals has grown exponentially from 50,000 to 500,000 annually, and this has a positive coefficient ( $\beta = 0.35$ , *p*-value = 0.02), suggesting that increased tourism might have contributed to an interest in or exposure to traditional plant knowledge, potentially from outsiders looking to learn from locals or the tourism sector promoting heritage.

Finally, the decline in agriculture as an economic driver, from 70% in 1970 to 20% in 2024, shows a strong negative relationship with knowledge transmission ( $\beta = -0.55$ , *p*-value < 0.01). This change indicates that as agriculture has become less central to the economy, there has been a corresponding loss in knowledge related to wild plants, which were traditionally integral to agricultural and rural life.

## 4. Discussion

#### 4.1. The Decline in Wild Greens in Corfu: Ecological, Demographic, and Cultural Drivers

The observed decline in herbaceous vegetation and cropland in Corfu aligns with a broader reduction in the taxonomic diversity of wild greens (WGs) over time. This reduction may be linked to shifts in land use, particularly the decline in open habitats like herbaceous vegetation and agricultural land, which have traditionally supported a diverse range of edible wild plants [43–45]. Herbaceous vegetation, which decreased, plays a crucial role in maintaining biodiversity by providing habitats for many WGs [46]. Similarly, cropland declined, reducing the availability of semi-managed landscapes where wild plants often coexist with cultivated species [19,47]. The loss of these habitats may explain why several species and genera have disappeared from the more recent dataset. Despite the decline in overall diversity, certain families such as Amaranthaceae, Amaryllidaceae, and Apiaceae remained dominant, reflecting their resilience in changing landscapes. The introduction of Dioscoreaceae and Caryophyllaceae in 2024 suggests that certain species within these families may be gaining attention in foraging practices, though these families have long been part of the Mediterranean flora and are not newly introduced due to environmental changes [28,48].

This shift may reflect changing foraging preferences rather than environmental adaptation. The comparison between 1970 and 2024 data in terms of demographic, climatic/ecological, and developmental factors reveals significant changes that have influenced the knowledge and transmission of wild plant use in Corfu. Understanding these changes is critical to assessing how traditional plant knowledge, particularly regarding wild plants, has been preserved, altered, or lost over time.

The older generation likely had greater familiarity with traditional knowledge, especially concerning the collection and use of wild plants for food and cultural purposes. As younger generations have become more educated and urbanised, this knowledge has been at risk of being forgotten or overshadowed by modern practices. While the reduction in the elderly population may indicate a loss of some traditional knowledge, it is also important to recognise that efforts to document and preserve ethnobotanical knowledge can mitigate these losses [8,45].

Traditionally, women have been the primary carriers of plant knowledge, particularly in rural and agricultural settings. In 1970, 75% of women were involved in the transmission

of plant knowledge. By 2024, this figure dropped to 65%, reflecting changes in gender roles as women enter the workforce in greater numbers. However, despite these changes, women remain pivotal in the preservation of plant knowledge, especially in communities that continue to practice subsistence farming and rely on wild plants for local uses [48–50].

The educational level in Corfu has dramatically improved since 1970. The increased access to formal education has brought about shifts in knowledge transmission, as younger generations now have greater exposure to modern scientific knowledge and less reliance on traditional ecological knowledge [51,52]. While this shift has facilitated economic and social progress, it has also contributed to the decline in the intergenerational transmission of wild plant knowledge, particularly among younger, more urbanised populations [24,45].

The ethnic diversity of Corfu has increased with a growing presence of other Balkan populations in 2024. This change reflects broader migration patterns within Greece and Europe [53]. The influx of new populations could introduce different perspectives on plant use, potentially enriching the local ethnobotanical knowledge [54]. On the other hand, it could also lead to the dilution of long-standing local plant traditions as new groups bring different practices and preferences. The mixing of ethnic groups can be both an opportunity and a challenge for the preservation of local plant knowledge.

The population density in Corfu nearly doubled in 2024. Urbanisation has surged, particularly in Corfu Town, which has led to a reduced rural population. This shift has resulted in fewer individuals actively involved in plant gathering and use. As the rural-urban divide deepens, younger people are less likely to engage with traditional ecological practices, as urban life offers more modern alternatives. Moreover, the migration of youth to urban areas for education and work further distances them from the practices of wild plant use [52,55]. It is important to note the apparent contradiction between the general ageing and depopulation trends observed in other rural Mediterranean regions and the increase in population density in Corfu. Furthermore, Corfu's relatively developed infrastructure and higher living standards compared to other rural areas may have played a role in attracting new residents [20]. Despite the general ageing of the population, these factors have likely influenced the demographic shifts observed on the island, highlighting the unique socio-economic dynamics of Corfu in comparison to other rural Mediterranean regions.

#### 4.2. Climatic and Ecological Factors

The average annual temperature in Corfu has increased by 1.5 °C from 1970 to 2024, which may have significant implications for plant growth patterns. While this temperature change is modest, it could affect the availability of certain species that are highly sensitive to temperature variations. The changes in the local climate may alter plant phenology (timing of flowering, fruiting, etc.), thereby influencing traditional harvesting times. As plants adapt to these changes or become less available, the traditional knowledge tied to them could be at risk [9,56,57].

The elevation of plant-growing areas has remained constant at an average of 400 m. Changes in soil quality and reduced rainfall are both indicators of ecological stress. Soil degradation and reduced water availability can severely affect the cultivation and wild growth of plants [58,59]. This reduction in environmental resources makes it increasingly difficult for communities to rely on wild plants for subsistence, pushing them to seek alternative sources from agriculture or markets. Consequently, local knowledge about plant uses might not be passed down as effectively when younger generations do not directly engage with plant gathering.

## 4.3. Developmental Factors

Corfu's urbanisation and tourism have undergone remarkable changes and the subject of mass tourism, and its negative effects often appeared during the conversations about WFP in our study. While tourism offers economic benefits, it also contributes to the commercialisation of traditional knowledge, with some practices becoming commodified for tourists. Furthermore, urbanisation has facilitated the abandonment of traditional lifestyles, diminishing the everyday use of wild plants [18,20]. Although urban dwellers may seek wild plants for cultural or medicinal purposes, the knowledge of where and how to gather them may be lost [17].

In 1970, Corfu's economy was heavily dependent on agriculture (70%); however, by 2024, this figure plummeted to just 20%, with tourism now the primary economic driver. As agriculture has shifted toward more intensive, market-oriented practices, traditional forms of subsistence agriculture, including the collection and use of wild plants, have diminished. The shift from an agriculture-based economy to a tourism-based economy has reduced the need for local plant knowledge, leading to the gradual loss of these traditions [60]. In recent years, Corfu has implemented conservation policies aimed at protecting its unique biodiversity, which indirectly supports the preservation of local plant knowledge [20]. However, these policies may also prioritise modern agricultural practices or tourism development over the traditional ecological practices that have sustained local plant knowledge for generations [61]. The tension between conservation efforts and the loss of traditional knowledge underscores the need for a balanced approach that incorporates the locale.

#### 4.4. Limitations and Challenges

The limitations of this study stem from several factors. Firstly, the historical data from 1970 may not fully capture all species of wild greens present at the time due to incomplete records. Secondly, the study's sampling is confined to specific regions in Corfu, which may not represent the entire island's plant and cultural diversity, potentially introducing sampling bias. Additionally, the ecological analyses are based on general climatic data, overlooking microclimatic variations that could influence plant diversity at a local scale. Cultural knowledge transmission was restricted to older generations, who may not fully reflect current practices or interests in wild plant collection, particularly for commercial use. The impact of urbanisation, population movement, pesticide use, pollution, and legal restrictions on plant collection were not fully explored and require further investigation.

## 5. Conclusions

The findings of this study highlight the significant decline in WFP diversity in Corfu over the past five decades, driven by land use changes, climatic variations, and socioeconomic transformations. The loss of 16 species and 10 genera since 1971 underscores the impact of habitat reduction due to declining herbaceous vegetation and cropland. Urbanisation and tourism have further distanced younger generations from traditional plant knowledge, while formal education has reshaped knowledge transmission pathways. Although resilient plant families persist and new species have emerged, the overall trend points to a gradual erosion of ethnobotanical traditions. The demographic transition, characterised by an ageing population, increased ethnic diversity, and shifting gender roles has further altered the preservation of WFP knowledge. Climatic factors, including rising temperatures and decreasing rainfall, present additional challenges to plant biodiversity and traditional harvesting practices. The transition from an agricultural to a tourism-based economy has also reshaped local livelihoods, reducing the reliance on WGs for subsistence. To address these challenges, conservation efforts must incorporate traditional ecological knowledge alongside modern environmental policies. Community-driven initiatives that engage local populations, particularly women and older generations, could aid in preserving plant knowledge and ensuring its intergenerational transmission. Future research should explore strategies for integrating traditional plant use into sustainable land management and conservation policies to safeguard both biodiversity and cultural heritage in Corfu.

**Author Contributions:** M.A.: Conceptualisation, Methodology, Software Analysis and Visualisation, Writing Original Draft and Review; N.S.: Conceptualisation, Methodology, Review, and Editing the Manuscript; I.U.: Data curation; R.S.: Conceptualisation, Data collection, Review and Edit; A.P.: Conceptualisation, Methodology, Data collection, Supervision, Review and Edit, Funding. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research was funded by the University of Gastronomic Sciences, Pollenzo, Italy. RS's fieldwork was funded by DAIS, Ca' Foscari University of Venice.

**Institutional Review Board Statement:** This is not applicable as this study was conducted anonymously; moreover, no personal data were collected, and ethical guidelines of the International Society of Ethnobiology were followed (https://www.ethnobiology.net/what-we-do/core-programs/iseethics-program/code-of-ethics/, accessed on 17 February 2025).

**Informed Consent Statement:** The study adhered to the International Society of Ethnobiology Code of Ethics: https://www.ethnobiology.net/wp-content/uploads/ISE-COE\_Eng\_rev\_24Nov08.pdf, accessed on 17 February 2025. Before conducting interviews, verbal informed consent was obtained from all participants. Participants were fully informed about the research purpose, methods, and their rights, including those to withdraw from the study at any time.

**Data Availability Statement:** Data supporting the reported results are available from the corresponding author upon reasonable request.

Conflicts of Interest: The authors declare no conflicts of interest.

# References

- Azam, F.M.S.; Biswas, A.; Mannan, A.; Afsana, N.A.; Jahan, R.; Rahmatullah, M. Are Famine Food Plants Also Ethnomedicinal Plants? An Ethnomedicinal Appraisal of Famine Food Plants of Two Districts of Bangladesh. *Evid. Based Complement. Alternat. Med.* 2014, 2014, 741712. [CrossRef]
- Mwajombe, A.R.; Liwenga, E.T.; Mwiturubani, D. Contribution of Wild Edible Plants to Household Livelihood in a Semiarid Kondoa District, Tanzania. World Food Policy 2022, 8, 276–298. [CrossRef]
- Sulaiman, N.; Aziz, M.A.; Stryamets, N.; Mattalia, G.; Zocchi, D.M.; Ahmed, H.M.; Manduzai, A.K.; Shah, A.A.; Faiz, A.; Sõukand, R.; et al. The Importance of Becoming Tamed: Wild Food Plants as Possible Novel Crops in Selected Food-Insecure Regions. *Horticulturae* 2023, 9, 171. [CrossRef]
- Alrhmoun, M.; Romano, A.; Sulaiman, N.; Pieroni, A. Old Plants for New Food Products? The Diachronic Human Ecology of Wild Herbs in the Western Alps. *Plants* 2025, 14, 122. [CrossRef]
- Sulaiman, N.; Verner, V.; Polesny, Z. Socioeconomic Dimensions of Wild Food Plant Use During the Conflict in Syria. *Econ. Bot.* 2023, 77, 267–281. [CrossRef]
- 6. Gockowski, J.; Mbazo'o, J.; Mbah, G.; Fouda Moulende, T. African Traditional Leafy Vegetables and the Urban and Peri-Urban Poor. *Food Policy* **2003**, *28*, 221–235. [CrossRef]
- 7. Brandes, D. Some Contributions to the Wall Flora in Corfu. Braunschweiger Geobot. Arb. 2022, 14, 107–134.
- Albuquerque, U.P.; Cantalice, A.S.; Oliveira, D.V.; Oliveira, E.S.; dos Santos, E.B.; dos Santos, F.I.R.; Soldati, G.T.; da Silva Lima, I.; Silva, J.V.M.; Abreu, M.B.; et al. Why Is Traditional Ecological Knowledge (TEK) Maintained? An Answer to Hartel et al. (2023). *Biodivers. Conserv.* 2024, 33, 859–866. [CrossRef]
- Anju, T.; Kumar, A. Traditional Ecological Knowledge and Medicinal Plant Diversity Usage among the Mullu Kuruman Tribes of Wayanad District of Kerala, India and Its Implications for Biodiversity Conservation in the Face of Climate Change. *Trees For. People* 2024, 16, 100595. [CrossRef]

- 10. Della, A.; Paraskeva-Hadjichambi, D.; Hadjichambis, A.C. An Ethnobotanical Survey of Wild Edible Plants of Paphos and Larnaca Countryside of Cyprus. *J. Ethnobiol. Ethnomedicine* **2006**, *2*, 34. [CrossRef] [PubMed]
- 11. Leonti, M.; Nebel, S.; Rivera, D.; Heinrich, M. Wild Gathered Food Plants in the European Mediterranean: A Comparative Analysis. *Econ. Bot.* **2006**, *60*, 130–142. [CrossRef]
- 12. Geraci, A.; Amato, F.; Di Noto, G.; Bazan, G.; Schicchi, R. The Wild Taxa Utilized as Vegetables in Sicily (Italy): A Traditional Component of the Mediterranean Diet. *J. Ethnobiol. Ethnomedicine* **2018**, *14*, 14. [CrossRef] [PubMed]
- 13. Pieroni, A.; Sulaiman, N.; Sõukand, R. Chorta (Wild Greens) in Central Crete: The Bio-Cultural Heritage of a Hidden and Resilient Ingredient of the Mediterranean Diet. *Biology* **2022**, *11*, 673. [CrossRef]
- Alrhmoun, M.; Sulaiman, N.; Haq, S.M.; Abidullah, S.; Prakofjewa, J.; Krigas, N.; Pieroni, A.; Sõukand, R. Is Boiling Bitter Greens a Legacy of Ancient Crete? Contemporary Foraging in the Minoan Refugium of the Lasithi Plateau. *Foods* 2024, 13, 3588. [CrossRef] [PubMed]
- 15. Tsioutsiou, E.E.; Giordani, P.; Hanlidou, E.; Biagi, M.; De Feo, V.; Cornara, L. Ethnobotanical Study of Medicinal Plants Used in Central Macedonia, Greece. *Evid. Based Complement. Altern. Med. ECAM* **2019**, 2019, 4513792. [CrossRef]
- 16. Skoula, M.; D'Agata, C.D.C.; Sarpaki, A. Contribution to the Ethnobotany of Crete, Greece. Bocconea 2009, 23, 479-487.
- 17. Sordinas, A. Wild Plant Gathering for Subsistence on the Island of Corfu, Greece; Memphis State University: Memphis, TN, USA, 1971.
- Andrianou, A.-A.; Papaioannou, G. Cultural Landscapes and Botanic Gardens: The Case of Mon-Repos Garden in Corfu Island, Greece. In *Cultural Sustainable Tourism*; Stankov, U., Boemi, S.-N., Attia, S., Kostopoulou, S., Mohareb, N., Eds.; Advances in Science, Technology & Innovation; Springer International Publishing: Cham, Switzerland, 2019; pp. 99–108. ISBN 978-3-030-10803-8.
- Marchi, M.; Ferrara, C.; Biasi, R.; Salvia, R.; Salvati, L. Agro-Forest Management and Soil Degradation in Mediterranean Environments: Towards a Strategy for Sustainable Land Use in Vineyard and Olive Cropland. *Sustainability* 2018, 10, 2565. [CrossRef]
- Mouratidis, K. Sustainable Tourism Development in the Ionian Islands. The Case of Corfu Island. In *Culture and Tourism in a* Smart, Globalized, and Sustainable World, Proceedings of the 7th International Conference of IACuDiT, Hydra, Greece, 17–19 June 2020; Springer: Cham, Switzerland, 2021; pp. 185–200. [CrossRef]
- 21. Hellenic Statistical Authority Main Page ELSTAT-ELSTAT. Available online: https://www.statistics.gr/en/home/ (accessed on 7 February 2025).
- 22. Reina-Rodríguez, G.A.; Soriano, I. Diachronic Cartography and Spatial Pattern Assessment in Coastal Habitats: The Case of Torredembarra (Northeast Spain). *J. Coast. Res.* **2008**, *1*, 87–98. [CrossRef]
- Boussema, S.B.F.; Allouche, F.K.; Ajmi, R.; Chaabane, B.; Gad, A.-A. Assessing and Monitoring the Effects of Land Cover Changes in Biodiversity. Case Study: Mediterranean Coastal Region, Sousse, Tunisia. *Egypt. J. Remote Sens. Space Sci.* 2023, 26, 185–196. [CrossRef]
- 24. Turner, N.J.; Turner, K.L. "Where Our Women Used to Get the Food": Cumulative Effects and Loss of Ethnobotanical Knowledge and Practice; Case Study from Coastal British Columbia. *Botany* **2008**, *86*, 103–115. [CrossRef]
- 25. Hanazaki, N. Local and Traditional Knowledge Systems, Resistance, and Socioenvironmental Justice. *J. Ethnobiol. Ethnomedicine* **2024**, *20*, 5. [CrossRef]
- Borelli, T.; Hunter, D.; Powell, B.; Ulian, T.; Mattana, E.; Termote, C.; Pawera, L.; Beltrame, D.; Penafiel, D.; Tan, A.; et al. Born to Eat Wild: An Integrated Conservation Approach to Secure Wild Food Plants for Food Security and Nutrition. *Plants* 2020, *9*, 1299. [CrossRef] [PubMed]
- 27. Al Hatmi, S.; Lupton, D.A. Documenting the Most Widely Utilized Plants and the Potential Threats Facing Ethnobotanical Practices in the Western Hajar Mountains, Sultanate of Oman. *J. Arid Environ.* **2021**, *189*, 104484. [CrossRef]
- Sbonias, K. Coastal Environments and Long-Term Human Practices in Corfu: A Seascape Perspective. J. Greek Archaeol. 2022, 7, 435–461. [CrossRef]
- 29. Weinmann, A.E.; Koukousioura, O.; Triantaphyllou, M.V.; Langer, M.R. Invasive Shallow-Water Foraminifera Impacts Local Biodiversity Mostly at Densities above 20%: The Case of Corfu Island. *Web Ecol.* **2023**, *23*, 71–86. [CrossRef]
- Kontogeorgis, G.; Livas, C.; Karali, N. Strategic Analysis of Mediterranean Island Destinations: The Case of Corfu. J. Environ. Manag. Tour. 2022, 13, 1525. [CrossRef] [PubMed]
- 31. Parisi, E.D. Rural Tradition and Cultural Identity of the Ionian Islands. J. Bus. Manag. Econ. 2019, 7, 10–13. [CrossRef]
- 32. Corfu. Wikipedia 2025. Available online: https://en.wikipedia.org/wiki/Corfu (accessed on 17 February 2024).
- ISE (International Society of Ethnobiology). The ISE Code of Ethics. Available online: https://www.ethnobiology.net/what-wedo/core-programs/ise-ethics-program/code-of-ethics/ (accessed on 15 November 2024).
- 34. Stevens Angiosperm Phylogeny Website. Available online: http://www.mobot.org/MOBOT/research/APweb/ (accessed on 17 February 2025).
- 35. The World Bank Group World Development Indicators | DataBank. Available online: https://databank.worldbank.org/source/ world-development-indicators (accessed on 17 February 2025).

- 36. Brandes, D. Vegetation Der Straßenränder Korfus; Tagungsbericht des Braunschweiger Kolloquiums vom. Hrsg. von Dietmar Brandes. Braunschweiger Geobotanische Arbeiten, Bd. 5. S. 247-262. Universitätsbibliothek der TU Braunschweig, 22–24. November 1996. Available online: https://www.zobodat.at/pdf/Brandes-Dietmar\_7\_1996\_0001-0016.pdf (accessed on 17 February 2025).
- 37. Alexopoulos, J.D.; Tomara, V.; Vassilakis, E.; Papadopoulos, T.D.; Dassenakis, M.; Poulos, S.; Voulgaris, N.; Dilalos, S.; Ghionis, G.; Goumas, G.; et al. A Contribution to Environmental Research of the Korissia Coastal Wetland (Corfu Isl., Greece), with the Application of Combined Geological and Geophysical Methods Supported by Geographic Information Systems. *Bull. Geol. Soc. Greece* 2007, 40, 1892. [CrossRef]
- Iliadou, E.; Kallimanis, A.S.; Dimopoulos, P.; Panitsa, M. Comparing the Two Greek Archipelagos Plant Species Diversity and Endemism Patterns Highlight the Importance of Isolation and Precipitation as Biodiversity Drivers. *J. Biol. Res.-Thessalon.* 2014, 21, 16. [CrossRef]
- 39. Ricci, P.; Libralato, S.; Capezzuto, F.; D'Onghia, G.; Maiorano, P.; Sion, L.; Tursi, A.; Solidoro, C.; Carlucci, R. Ecosystem Functioning of Two Marine Food Webs in the North-Western Ionian Sea (Central Mediterranean Sea). *Ecol. Evol.* **2019**, *9*, 10198–10212. [CrossRef]
- 40. Valli, A.; Kougioumoutzis, K.; Iliadou, E.; Panitsa, M.; Trigas, P. Determinants of Alpha and Beta Vascular Plant Diversity in Mediterranean Island Systems: The Ionian Islands, Greece. *Nord. J. Bot.* **2019**, *37*, e02156. [CrossRef]
- 41. Corrêa, R.C.G.; Di Gioia, F.; Ferreira, I.C.F.R.; Petropoulos, S.A. *Wild Greens Used in the Mediterranean Diet*; Elsevier: Amsterdam, The Netherlands, 2020; pp. 209–228.
- 42. Christoforatou, E. *Plants and People on the Island of Corfu–An Ongoing Relationship;* Green Corfu: Corfu, Greece, 2024; Available online: https://corfuherbs.com/en/book-chapter/ (accessed on 7 February 2025).
- Łuczaj, Ł.; Pieroni, A.; Tardío, J.; Pardo-de-Santayana, M.; Sõukand, R.; Svanberg, I.; Kalle, R. Wild Food Plant Use in 21st Century Europe: The Disappearance of Old Traditions and the Search for New Cuisines Involving Wild Edibles. *Acta Soc. Bot. Pol.* 2012, *81*, 359–370. [CrossRef]
- 44. Parra, S.A.; Folchi, M.; Simonetti, J.A. Knowledge of Native Edible Plants in a Monoculture Plantation-Dominated Landscape. *J. Ethnobiol.* **2019**, *39*, 567. [CrossRef]
- 45. Barceló, M.; Tengö, M.; Simonetti, J.A.; Gelcich, S. Exploring Links between Local Knowledge, Values and Livelihoods in Land-Sea Interface: Insights on Emerging Tradeoffs and Change in Southern Chile. *Ecosyst. People* **2024**, *20*, 2329562. [CrossRef]
- 46. Gilliam, F.S. The Ecological Significance of the Herbaceous Layer in Temperate Forest Ecosystems. *BioScience* 2007, *57*, 845–858. [CrossRef]
- 47. Herbertsson, L. Pollinators and Insect Pollination in Changing Agricultural Landscapes. Doctoral Thesis, Lund University, Lund, Sweden, 2017.
- Ali-Shtayeh, M.S.; Jamous, R.M.; Al-Shafie', J.H.; Elgharabah, W.A.; Kherfan, F.A.; Qarariah, K.H.; Khdair, I.S.; Soos, I.M.; Musleh, A.A.; Isa, B.A.; et al. Traditional Knowledge of Wild Edible Plants Used in Palestine (Northern West Bank): A Comparative Study. J. Ethnobiol. Ethnomedicine 2008, 4, 13. [CrossRef] [PubMed]
- Luzuriaga-Quichimbo, C.X.; Hernández Del Barco, M.; Blanco-Salas, J.; Cerón-Martínez, C.E.; Ruiz-Téllez, T. Plant Biodiversity Knowledge Varies by Gender in Sustainable Amazonian Agricultural Systems Called Chacras. *Sustainability* 2019, 11, 4211. [CrossRef]
- 50. Caballero-Roque, A.; Silva-Rivera, E.; Gómez-Tolosa, M.; Pérez-Farrera, M.A.; Tejeda-Cruz, C.; López, S. Traditional Knowledge Surviving the New Millennium: Women's Use of Wild Edible Plant Species in a Protected Natural Area. 2024. Available online: https://www.researchsquare.com/article/rs-4565461/v1 (accessed on 17 February 2025).
- Ruddle, K. The Transmission of Traditional Ecological Knowledge Kenneth Ruddle. Paper presented to the Panel Session on "Traditional Ecological Knowledge", Second Annual Meeting of the Society for the Study of Common Property, University of Manitoba, Winnipeg, NB, Canada, 26-29 September 1991.
- Narváez-Elizondo, R.E.; González-Elizondo, M.; Castro-Castro, A.; González-Elizondo, S.; Tena-Flores, J.A.; Chairez-Hernández, I. Comparison of traditional knowledge about edible plants among young Southern Tepehuans of Durango, Mexico. *Bot. Sci.* 2021, 99, 834–849. [CrossRef]
- 53. Hatziprokopiou, P. Immigrants' Integration and Social Change: Greece as a Multicultural Society. In Proceedings of the 2nd LSE Symposium on Modern Greece, Current Social Science Research in Greece, Enfield Town, Middlesex, UK, 10 June 2005.
- Maroyi, A. Ethics in Ethnobotanical Research: Intersection of Indigenous and Scientific Knowledge Systems. J. Pharm. Nutr. Sci. 2020, 10, 169–174. [CrossRef]
- 55. Borda, Á.J.; Sárvári, B.; Balogh, J.M. Generation Change in Agriculture: A Systematic Review of the Literature. *Economies* **2023**, *11*, 129. [CrossRef]
- 56. Psaroudaki, A.; Dimitropoulakis, P.; Constantinidis, T.; Katsiotis, A.; Skaracis, G.N. Ten Indigenous Edible Plants: Contemporary Use in Eastern Crete, Greece. *Cult. Agric. Food Environ.* **2012**, *34*, 172–177. [CrossRef]

- 57. Aurelle, D.; Thomas, S.; Albert, C.; Bally, M.; Bondeau, A.; Boudouresque, C.-F.; Cahill, A.E.; Carlotti, F.; Chenuil, A.; Cramer, W.; et al. Biodiversity, Climate Change, and Adaptation in the Mediterranean. *Ecosphere* **2022**, *13*, e3915. [CrossRef]
- 58. Gavrilescu, M. Water, Soil, and Plants Interactions in a Threatened Environment. *Water* **2021**, *13*, 2746. [CrossRef]
- 59. Hailu, B. Impacts of Soil Salinity/Sodicity on Soil-Water Relations and Plant Growth in Dry Land Areas: A Review. *J. Nat. Sci. Res.* **2021**, *12*, 1.
- 60. Gálvez Nogales, E.; Puntsagdavaa, A.; Casari, G.; Bennett, A. Linking Agriculture and Tourism to Strengthen Agrifood Systems in Asia and the Pacific; FAO: Rome, Italy, 2023; ISBN 978-92-5-138026-0.
- 61. Kennedy, G.; Wang, Z.; Maundu, P.; Hunter, D. The Role of Traditional Knowledge and Food Biodiversity to Transform Modern Food Systems. *Trends Food Sci. Technol.* **2022**, 130, 32–41. [CrossRef]

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.