



Evaluation of the Botanical Tourism Potential of the Protected Areas in the Central Black Sea Region

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Abstract

When examining developed and developing countries, it is evident that the tourism industry holds significant importance due to the high returns from foreign exchange. Countries striving to increase their share of international tourism are engaged in various efforts. The behaviour of present-day local and foreign tourists in participating in tourism activities or purchasing tourism services indicates that alternative tourism activities could replace mass tourism. Therefore, countries aiming to enhance their international tourism revenues should preserve alternative tourism values and ensure sustainability. Developments in industry have brought about specific environmental issues. Due to natural balance problems, people are more interested in clean air and wildlife. This situation leads individuals and societies towards ecotourism. Botanical Tourism is also gaining prominence in this process. When considering this tourism activity, it is evident that our country has significant geographical potential. Turkey, located in the world's temperate zone, stands out with its unique plant diversity compared to many surrounding countries. However, it is quite challenging to say that this potential is adequately recognised, protected and utilised for tourism purposes. This study aims to identify the elements related to botanical tourism in the protected areas of the Central Black Sea Region, one of Turkey's rich regions in terms of natural and cultural structures. The aim is to contribute to promoting and developing botanical tourism. Sustainable tourism practices, particularly botanical tourism, should be given priority to ensure the region's development.

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INTRODUCTION

Rapid changes occur in every aspect of human life in today's conditions. Tourism activities are among the areas that have experienced significant change. Environmental conditions, in addition to economic situations, also significantly affect tourism activities. With an increased understanding of the importance of sustainability and the rise in environmental awareness, interest in ecotourism is growing. As people participate in ecotourism, they become more sensitive towards preserving nature and ensuring its sustainability. Identifying the natural resources in a country and making necessary plans are crucial for developing ecotourism, the country's economy, and establishing conservation awareness. Therefore, one of the important issues that needs to be addressed is botanical tourism.

Tourism

Tourism and Environment

The tourism industry is very important to developed and developing countries due to its ability to generate foreign currency income. Countries striving to increase their share of international tourism are engaging in various efforts. Particularly after World War II, positive changes in global economic prosperity have led to increased participation in tourism activities by individuals, groups, and masses, with significant movements observed in mass tourism participation. When examining the behaviour of present-day domestic and foreign tourists in participating in tourism activities or purchasing tourism services, it is understood that mass tourism could give way to alternative tourism movements. Therefore, countries that want to increase their international tourism income must preserve and ensure the sustainability of alternative tourism values (Baykal & Çimen, 2015).

Natural and cultural resources also form the tourism supply of countries and regions. These resources, essential elements of a country's natural, historical, and cultural richness, are commonly referred to as tourism resources as the tourism industry and tourists heavily utilise them. They represent environmental values, including air, water, soil, flora, fauna, and socio-cultural surroundings. Many of these environmental values belong to society and can often not be recreated. All these environmental values are valuable assets with superior attractiveness for tourism (Kahraman, 1998).

Tourism and Sustainability Concept

Sustainability is a holistic approach that aims to balance human life's needs and the continuity of natural resources and make compatible planning from today to the future with its economic, environmental, and social dimensions. To ensure sustainability, resources must be constantly evaluated. Protection should be provided within the evaluation framework, and protection awareness should be prioritised (Kaypak, 2010). The link between tourism and sustainable development is more than obvious due to the following two facts: tourism is one of the most powerful industries in the world, and the main "resources" that it uses in its development are the most beautiful natural, cultural and historical places in the world (Kostic & Toncev, 2014).

The document 'Agenda 21 for the Tourism and Travel Industry', adopted at the United Nations Conference on Environment and Development on June 14, 1992, addresses the issue of sustainable tourism. According to this document, sustainable tourism is defined as an activity that meets the needs of tourists and host regions while preserving future opportunities and maintaining cultural integrity and compatibility, ecological processes, biological diversity, and life support systems. It also anticipates resources meeting economic, social, and aesthetic needs,

ensuring that the outcomes do not disrupt local environments, communities, or cultures but rather benefit from tourism activities (Altıparmak, 2002).

Ecotourism

The Commission on Protected Areas and National Parks of the International Union for Conservation of Natural Resources has defined ecotourism as ‘environmentally responsible travel and visitation to relatively unspoiled natural areas for the enjoyment and understanding of nature, which encourages the conservation of natural resources, minimises visitor impacts and stimulates beneficial socio-economic relationships of the local population’ (Ormsby & Mannle, 2006).

Many international and national institutions and organisations, especially the United Nations, are working to manage tourism through a planned and controlled process. In this context, on 30 July 1998, at the 46th General Meeting of the United Nations, 2002 was accepted as the International Year of Ecotourism (United Nations, 1998; cited in Polat & Aktaş Polat, 2013).

The concept of ecotourism, among nature-based tourism types, was introduced by Hector Ceballos-Lascurain and defined as enjoying and appreciating nature. Within the scope of the tourism diversification project of the Ministry of Tourism, ecotourism activities are sub-categorized as botanical (flora) tourism, plateau tourism, trekking, cave tourism, bird observers, underwater diving, sportive angling, bicycle tourism, horseback trekking, camping caravan tourism, hunting tourism, river tourism (canoe-rafting), photo safari and windsurfing (Aklıbaşında et. al., 2011; cited in Eskiyörük, 2013).

According to the World Tourism Organization, the components of ecotourism are (Şahin, 2007);

- Protection of biological diversity,
- Protecting the interests of local people and raising their awareness,
- Providing services to small groups by small-scale businesses,
- Consumption of non-recyclable resources at the lowest level,
- Participation of local governments in tourism management and their importance,
- It is defined as developing job opportunities and property in favour of local people.

There are studies on the potential of tourism depending on natural environmental conditions in different regions of Turkey. To give a few examples, in a study by Tuncel and Doğaner (1989), natural tourism assets in Amasya and its immediate surroundings, located in the Central Black Sea Region, were mentioned, and the importance of these resources in local tourism was highlighted. Gürgen (1998), in his study, considered a research project, states that there are many alternative tourism opportunities depending on the natural environmental conditions around Ordu-Giresun. In Şahin & Uzun’s (2000) study titled ‘Natural Tourist Attractions of the Vezirköprü Region’, the natural and human-based tourist attractions of the Vezirköprü region are mentioned, and especially the importance of Kunduz Mountain and the forest ecosystem in terms of tourism is emphasised (Şahin & Yılmaz, 2009).

In Demirtaş’s (2013) study, stating that Adana has many natural and cultural values that have not yet been discovered, he stated that in order to develop nature tourism, activities should be planned separately. All areas should

be explored in detail.

In the study of Yılmaz and Şahin (2009), touristic attractions in Samsun City and its immediate surroundings were determined and used for tourism purposes. The study determined that people interested in history, nature, and spa tourism come to Samsun, and short-term tourism is common. This situation has been indicated as promising for the development of tourism.

Botanical Tourism

People are more interested in clean air and natural life, especially due to the natural balance problems caused by the chemical problems brought about by the industrial system. This situation directs people and societies to 'botanical' tourism, which is natural tourism (Eminağaoğlu & Akyıldırım Beğen, 2015).

Botanical tourism has become one of the most common outdoor recreation activities in the Western world that does not harm nature. In particular, the number of plant observers has increased rapidly in the last fifty years. Plant observation can be defined as 'the activity of observing and identifying plants in their geographical habitats' (Sayılan, 2008).

Our country has an important geographical potential when viewed from the perspective of this tourism activity. Turkey, located in the world's temperate zone, attracts attention with its plant diversity characteristics that differ from those of many countries around it. The number of plant species distributed in Turkey is close to that distributed throughout Europe (Erik & Tarıkahya, 2004).

This feature of Turkey stems from the diversity of geographical factors or, in other words, the growing environments of plants. Many geographical factors, such as changes in climate characteristics occurring over short distances, variations arising from morphological characteristics, and differences in soil types, lead to the differentiation of plant formations and diversification in terms of species (Avcı, 2005).

There are studies conducted in our country regarding botanical tourism;

Adana is a privileged city with a climate where four seasons can be experienced together, green plateaus, rich vegetation, rivers, seas, beaches, history, culture, hospitable people, and world-renowned cuisine. The diversity of resources that Adana has is more than capable of responding to alternative tourism and special interest tourism. In this sense, it is stated that travel agencies' product diversification for ecotourism and organising special tours for ecotourists will increase participation in tourism activities in Adana (Karacoğlu et al., 2013). Yılmaz and Karahan (2010) stated in their study that the Palandöken Mountains constitute an important potential for alpine plants in the development of botanical tourism with the four-season tourism approach.

Nur & Balpınar (2013) stated that in Adana province, dune ecosystems with Mediterranean climate characteristics and world-endangered plant species are important for plant observation. In the study conducted by Sayılan (2008), it was reported that introducing the endemic Muş tulip (*Tulipa sinstensisii* Baker), which has a wide distribution area in Muş province, into botanical tourism is important for the region.

In the study conducted by Kandemir (2016), 49 of the approximately 2400 plant species living in Erzincan province, one of the most important places in the world regarding natural plant species, are the only habitats in the world. However, the fact that this diversity has not been used in alternative tourism activities planned for the province

to date has been considered a deficiency. This study discusses the importance of species-specific Erzincan in terms of alternative tourism.

Turkey's Tourism Strategy

The study was carried out to reveal Turkey's ecotourism policies within the framework of the Five-Year Development Plans prepared by the State Planning Organization since 1963; The First, Second, Third, and Fourth Five-Year Development Plans are the plans with the weakest ecotourism policies; The Fifth, Sixth and Seventh Five-Year Development Plans partially include ecotourism policies; It is stated that the Eight and Ninth Five-Year Development Plans emerged as plans that comprehensively included ecotourism policies. The Eighth and Ninth Five-Year Development Plans adopted an approach to prevent tourism activity that could hurt nature and the sociocultural environment (Polat & Aktaş Polat, 2013).

Turkey Tourism Strategy 2023 and Action 2013 aim to use Turkey's natural, cultural, historical, and geographical values in a conservation-use balance and increase Turkey's tourism share by developing tourism alternatives (Taş, 2012). Regarding biodiversity and ecotourism potential, it is stated in the Turkish Tourism Strategy that studies will be carried out primarily to develop ecotourism (Şen, 2010).

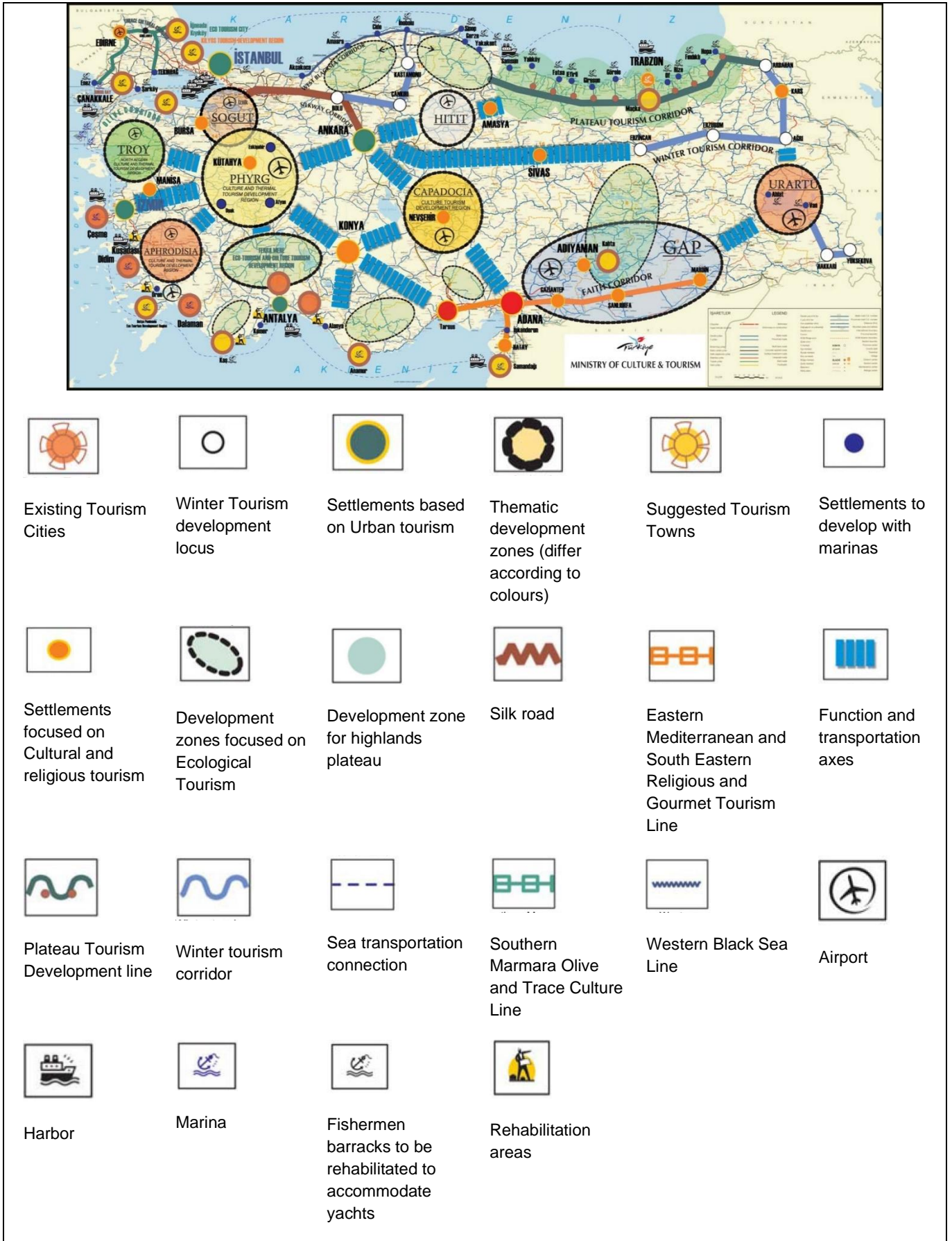


Figure 1. Turkey Tourism Strategy 2023-Conceptual Action Plan (T.R. Ministry of Culture and Tourism, 2007.

<https://gottagoturkey.com/map-tourism-strategy-of-turkey-2023>)

Flora

Importance of Plants

Biodiversity resources are the most important life support systems for the world. More than 6 billion people live in the world today. This number is estimated to be 8-9 billion by 2050. Humanity's livelihoods depend on the genetic material and species richness based on ecosystem integrity. There are various ideas about biodiversity extinction. However, in the last 20-30 years, the extinction process has gained an even more negative perspective than before. These losses increasingly damage our world's natural resources and threaten our future sustainable ecological and economic development. Plants are a very important part of the world's biological diversity and are the main resources to ensure human well-being. In addition, agricultural products and thousands of wild plants that meet basic nutritional needs have the potential to provide protection, clothing, heating, medicine, and food and have a great deal of economic and cultural importance in terms of continuing human existence throughout the world. Plants also have an important key role in maintaining basic ecosystem functions (Eminağaoğlu & Akyıldırım Beğen, 2015).

Flora of Turkey

The number of plant species distributed in Turkey is close to the number of plants distributed throughout the European continent. It is important in Turkey's flora regions, especially regarding plant diversity. Many special plants are diverse. Many special plants belonging to these regions are distributed among the plant communities in Turkey. Some are endemic, and some are plants whose distribution areas extend beyond the country's borders. Turkey is important in terms of endemism (Avcı, 2005). Turkey has a rich flora, and studies on its flora continue to be conducted rapidly. According to the list of Turkish Plants, Vascular Plants (2012), the total number of taxa in our country (total sub-generic taxa) is 11700, and the number of endemic taxa is around 3700.

Protected Areas

The Birth of Nature Protection Measures

Human beings have met all their needs from nature since the day they existed and have never even considered the assumption that the rich resources offered by nature will one day decrease or even face the danger of running out. Over time, needs have increased, scientific and technological developments have been added to the needs, such as nutrition, shelter, and defence, and nature has begun to be defensive. Nature has begun to be destroyed at a rapid pace. Realising the destruction brought to the agenda the effort to protect and regain nature and created the concept of nature conservation. Nature conservation is not a very new concept; its history dates back to ancient times. However, addressing it globally and the role of effective approaches in conservation has recently come to the fore. Today, many areas are protected by various nature protection statutes (Yeşil, 2009).

Concept of Protected Area

The protected area concept is defined as a geographical area managed by legislation to ensure the long-term protection and continuity of ecosystem services and cultural values together with nature (General Directorate of Nature Conservation and National Parks, 2023). The International Union for Conservation of Nature (IUCN), one of the most effective institutions in the world on this subject, has developed an agreed-upon global definition.

The IUCN protected area concept is defined as a clearly defined geographical area recognised, allocated, and

managed through legal or other effective means to ensure the long-term conservation of nature and related ecosystem services and cultural values (Dudley et al., 2010).

Protected areas are generally divided into two categories: natural and cultural. IUCN's particular focus is on nature conservation. Protected areas in Turkey are divided into many categories (Yıldız & Aydın, 2023). Since this study focuses on botanical tourism, it will focus on protected area categories, especially those that have gained official qualifications for nature conservation purposes.

Many studies and conservation activities show that protected areas have economic, ecological, cultural, and social benefits:

1. They are safe havens for plant and animal species whose habitats are threatened. 80% of the species on the IUCN red list are in protected areas.
2. They protect and support habitats home to many major food sources (plants, fish, and medicinal plants).
3. They contribute to protecting cultural, architectural, and traditional lives.
4. It is a source of drinking water.
5. It is one of the most important tools in the fight against poverty by providing economic support and job opportunities. In recent years, they have become one of the important tools in the fight against poverty by providing economic opportunities in many different sectors to the local people living in and around protected areas.
6. They reduce the effects of natural disasters by creating barriers and buffer zones against storms, floods, and drought.
7. They are exemplary places where the most successful examples of sustainable development are implemented.
8. They present the best governance models and examples with a participatory decision-making and management approach.
9. They are places that offer recreational opportunities. Protected areas offer you many opportunities to be alone with nature or do sports.
10. They are important tools in resolving conflicts. In particular, conflicts from the past have been forgotten in managing many protected areas, such as cross-border protected areas and parks for peace.
11. It is one of the most important tools in combating climate change and its effects (Pamukoğlu & Ekmekçi, 2013).

Protected Areas in the World

All these protected areas exist worldwide and are different in many respects. They differ from each other in terms of their size, the species they contain, ecosystem and physical characteristics, their management methods, the resources available for management, the social and cultural features they contain, the difficulties in their protection, and the status names they receive on a national scale (Demirayak, 2006).

Protected Areas in Turkey

Studies on protected areas within the forest regime in our country started according to Article 25 of the Forest Law No. 6831 dated 1956, and Yozgat Çamlığı National Park was first established in 1958 (Kuvan, 1999).

The National Parks Law, prepared in 1983, defined the protection statuses of National Parks, Natural Parks, Nature Reserves, and Natural Monuments (National Parks Law, 1983). After the 1990s, different protection statuses came into effect within the framework of the activities of some Ministries, especially the Ministries of Environment, Culture, and Tourism.

There are studies in our country where the components of protected areas and tourism activities are used together. Regarding the sustainability of the sensitive ecosystem of protected areas, which are alternative tourism sources in Kayseri, tourism activities should be carried out within the understanding of nature tourism. It has been stated that Erciyes Mountain and Yamula Dam can be shown as suggested areas, apart from the areas with protection status where tourism activities can be implemented in Kayseri Province. In terms of the sustainability of the sensitive ecosystem, it has been stated that successful results can be achieved by implementing tourism activities here by adhering to the principle of sustainable natural resource use without harming the biodiversity in the area and the integrity of the ecosystem (Ceylan, 2013).

In Taşdelen's (2013) study, Potential Areas for Nature Tourism in Mersin Province, Nature Tourism Values were explained, the characteristics of existing Mersin Province protected areas were introduced, and area suggestions for Göksu Delta and Mersin Province Nature Tourism activities were presented. Botanical tours are also included within the scope of nature tourism activities that can be carried out in all wildlife development areas within the province.

Turkey has a very lucky position in terms of botanical tourism and, therefore, eco-tourism potential. However, it is quite challenging to say that this potential is well-recognised, protected, and utilised for tourism purposes. Therefore, there is a need for studies focusing on botanical tourism in Turkey. This study focuses on the Central Black Sea Region of Turkey, one of the regions with high potential in nature and cultural tourism activities. The study aims to identify the relevant elements that could be the subject of botanical tourism in the protected areas in the Central Black Sea Region. In the long run, the findings obtained aim to contribute to the studies related to botanical tourism.

Method

In this study, the Central Black Sea Region of the Black Sea Region, which has significant potential in terms of ecotourism and botanical tourism, was selected as the study area. Samsun, Amasya, Ordu, Tokat, and Çorum provinces located in the Central Black Sea Region are included in the scope of the study.

The Black Sea Region, located north of our country, consists of the Eastern Black Sea, Central Black Sea, and Western Black Sea. Central Black Sea Region: The Eastern border is with the Eastern Black Sea Region. It starts from the west of the town of Piraziz on the coast, passes over Karagöl Mountain in the interior, and descends to the Upper Kelkit Trough in the South. Here it passes through Eğme Mountain and Suşehri Plain (between Suşehri-Akıncılar) and intersects with the Black Sea-Central Anatolia Region border at Kızıldağ. This border was formerly defined as a line extending towards Suşehri, coinciding with the Melet Stream in Ordu, which mixes with the Black Sea. Today, Ordu is the western border west of the Melet Stream, the region's border with the Western Black Sea

Region. It starts from the west of the town of Yakakent, located at the beginning of the Bafra plain on the coast, and extends in the northeast-southwest direction, cutting the Altinkaya Dam Lake on Kızılırmak in the middle. Further on, it passes from the east of Kunduz Mountain and Çal Mountain, between Gümüşhacıköy Osmancık and Hamamözü-Laçın districts, and intersects with the Black Sea-Central Anatolia Region border in the Kızılırmak valley, east of Oğuzlar town (Central Black Sea Region, 2023). The Black Sea Region is in the Euro-Siberian flora area, one of Turkey’s three largest flora areas. The Euro-Siberian flora area continues the Euxin province, which dominates many Caucasus and the Crimea and Dobrudja mountains (Öztürk, 2010).

This study used document analysis. Document analysis is a frequently used method in the social sciences and is evaluated within the scope of qualitative research. Hoepfl (1997) considers document analysis one of the most valuable sources of information for qualitative research. Examining the documents makes it possible to obtain detailed information about the phenomenon under investigation (Travers, 2001).

Findings

Samsun, Tokat, and Amasya should be considered as they are the gene centres of many fruit genera and species, broad beans, beans, lentils, and various legumes used as animal feed. These provinces are the gene origins and micro gene centres of relevant natural plants, which are important for our country’s flora and agriculture (Table 1).

Table 1. Agricultural plant species of Anatolian origin and micro gene centres in Turkey (Demirayak, 2006)

Regions	Plants
Thrace-Aegean Region	Bread wheat, Durum wheat, Poulard wheat, stick wheat, small red wheat, lentils, chickpeas, melon, vetch, lupine, clover
South-Southeastern Anatolia	Double grain wheat (<i>Triticum diococcum</i>), small red wheat, <i>Aegilops speltoides</i> , pumpkin, watermelon, cucumber, beans, lentils, broad beans, grape vine, froge crops
Kayseri and its surroundings	Almonds, apples, peas, fruit types, grape vines, lentils, chickpeas, alfalfa and marigolds
Samsun, Tokat, Amasya	Numerous fruit genera and species, broad beans, beans, lentils, and various legumes are used as animal feed
Ağrı and its surroundings	Apple, apricot, cherry, sour cherry, forage legumes, watermelon

When current data scans are performed, it is seen that there are many protected areas in the study area. The identified protected areas are presented in Table 2.

Table 2. Protected areas in the provinces of the Central Black Sea Region

Protected area status	Province	Name of the Protected Area	Measurement	Announcement Year
Nature Reserve	Samsun	Haciosman Forest Nature Reserve	128 hectares	1987
National Park	Çorum	Boğazköy-Alacahöyük National Park	2600 hectares	1988
Wetlands with Ramsar Status	Samsun	Kızılırmak Delta	21700 hectares	1998
Wetlands of National Importance	Samsun	Ladik Lake	1836 hectares	2014
Wetlands of National Importance	Samsun	Yeşilirmak Delta Wetland	34340 hectares	2020
Wetland of Local Importance	Tokat	Sulu Adalı Lake Wetland	178 hectares	
Wetland of Local Importance	Tokat	Karaca Lake Wetland	33 hectares	

Table 2. Protected areas in the provinces of the Central Black Sea Region (cont.)

Wetland of Local Importance	Ordu	Çığ Lake Wetland	129 hectares	2019
Natural Monuments	Samsun	Çalkaya Team Waterfalls	13,00 hectares	2021
Natural Parks	Çorum	Çatak Nature Park	294,64 hectares	1984
Natural Parks	Tokat	Ballica Cave Nature Park	484,86 hectares	2007
Natural Parks	Çorum	Sıklık Nature Park	272,00 hectares	2009
Natural Parks	Çorum	Aksu Nature Park	68,06 hectares	2021
Natural Parks	Ordu	Ulugöl Nature Park	69,39 hectares	2009
Natural Parks	Ordu	Cınarsuyu Nature Park	6,68 hectares	2011
Natural Parks	Samsun	Sarıgazel Nature Park	142,65 hectares	2011
Natural Parks	Samsun	Vezirsuyu Nature Park	287,65 hectares	2011
Natural Parks	Samsun	Bayraktepe Nature Park	132,01 hectares	2015
Natural Parks	Samsun	Amazon Nature Park	562,59 hectares	2015
Natural Parks	Samsun	Şahinkaya Canyon Nature Park	1.032,14 hectares	2015
Natural Parks	Tokat	Zinav Lake Nature Park	401,20 hectares	2011
Natural Parks	Amasya	Boraboy Nature Park	259,60 hectares	2013
Wildlife Development Areas	Çorum	Çorum Kargı Wildlife Development Areas	1,962 hectares	2005
Wildlife Development Areas	Samsun	Samsun Bafra Kızılırmak Delta Wildlife Development Areas	5,173 hectares	2005
Wildlife Development Areas	Samsun	Samsun Terme Lakes Simenlik Lake Wildlife Development Areas	3,349 hectares	2005
Wildlife Development Areas	Tokat	Tokat-Kazgözü Wildlife Development Areas	1,216 hectares	2006

This study area has 1 National Park, 1 Nature Reserve, 1 Wetland with Ramsar Status, 2 Wetlands of National Importance, 3 Wetlands of Local Importance, 4 Wildlife Development Areas, 13 Nature Parks and 1 Natural Monument. The existence of these protected areas shows that biological diversity is protected to a significant extent. 12 of these areas are in Samsun, 5 in Çorum, 5 in Tokat, 3 in Ordu, and 1 in Amasya, and their total number is 26.

It shows the national parks declared within our country's territory under National Parks Law No. 32-2873 (National Parks Law No. 2873 and Related Legislation, 2023). The investigations made here show that the Kızılırmak Delta Wetland with Ramsar Status is the second largest area among the 14 Ramsar Status areas in our country, with an area of 21700 hectares.

In order to introduce the cultural and natural assets with universal values, which are accepted as the common heritage of all humanity, to the world, to create awareness in society to protect this universal heritage, and to ensure the necessary cooperation to preserve the cultural natural values that are deteriorated or destroyed for various reasons, UNESCO's 17 October – 21 October Within the scope of the 17th General Conference held in Paris between November 1972, the 'Convention Concerning the Protection of the World Cultural and Natural Heritage' was adopted on 16 November 1972. This Agreement, which was approved for our participation by Law No. 2658 dated 14.04.1982, was approved by the Decision of the Council of Ministers No. 8/4788 dated 23.05.1982 and published in the Official Gazette No. 17959 dated 14.02.1983.

Natural formations, monuments, and sites of international importance and therefore worth admiring and protecting have 'World Heritage' status. As a result of the study carried out by our country under the responsibility of the General Directorate of Cultural Heritage and Museums, 21 important assets have been included in the UNESCO World Heritage List. Of these beings, It is located in Hattusa (Boğazköy)-Hittite Capital Çorum. It is in the cultural

heritage category (Turkey on the World Heritage List, 2023).

Conclusion and Discussion

Today, tourism is one of the most important sectors for developed and developing countries. The public and private sectors are constantly collaborating to develop the tourism sector and get a larger share of the tourism market. Countries are constantly working on tourism-related planning, investment, organisation, domestic tourism, foreign tourism, research and development, service, transportation, infrastructure, promotion, marketing, education, blending, development of destinations, and diversification of tourism because ensuring sustainability in the tourism sector and the emergence of various types of tourism that will arouse interest for societies and individuals by leaving the traditional and narrow patterns of tourism activities have brought the issue of alternative tourism to the agenda (Kurtaran Çelik & Mutlu, 2022).

The ecosystem diversity in a particular area makes it valuable for nature tourism. When examining the protected areas in the study area, it is seen that the field is rich in terms of ecosystem diversity. The Middle Black Sea Region protected areas have forest ecosystems, steppe ecosystems, wetland ecosystems, sea and coastal ecosystems, and mountain ecosystems. The ecosystem diversity of the area is in demand for botanical tourism and indicates a great tourism potential.

In the study conducted by Demirayak (2006), forest ecosystems, steppe ecosystems, wetland ecosystems, marine and coastal ecosystems, and mountain ecosystems, which are reported as different ecosystems, were also identified. Both studies show that rich ecosystem diversity also leads to greater plant diversity.

The study area contains taxa from the Euxine province and Mediterranean enclaves (Kutbay & Sürmen, 2011). This feature makes the study area even more valuable. There are very rich places in terms of natural and cultural features in the study area. It also includes unspoiled areas and areas with high biodiversity (Bahtiyar Karadeniz & Sarı, 2018). The relevant protected areas have an important richness in lakes, waterfalls, spring waters, plateaus, and vegetation that stands out due to their diversity and rarity.

According to Yeşil (2009) study, Turkey's location and ecological characteristics make its vegetation rich in species. Forests with the lushest vegetation and the tree species that make up them have a privileged place. Especially *Cedrus libani* A. Rich, protecting species distribution in our country and their environments is important. There are important areas in Tokat where the *Cedrus libani* species is protected. The existence of these areas makes Tokat an important centre of attraction.

In Kaya and Aksakal's study (2005); In our country, many relict plants are the remains of the Boreal-Tertiary flora that covered a large part of Europe-Asia in the Black Sea region. *Lilium ponticum* is one example. Although there are widely distributed species such as *Fagus orientalis* and *Helleborus orientalis* in the Euxine belt, west of Ordu, it has been reported that Caucasian elements are rapidly decreasing. It is thought that the study area with this belt can be one of the attractions for botanical tourism with this feature.

In the study conducted by Yılmaz Şahin (2009) in the city of Samsun, It was stated that the city and its immediate surroundings are rich in number and variety, have historical, cultural, and natural attractions, and have a high tourism potential with transportation and accommodation opportunities. It has also been stated that although there is a significant supply potential, the current potential has not yet been brought into tourism and city economy effectively

and planned. The examinations made in this study also support the same view.

There are 26 protected areas in the working area, each containing different ecosystem types. This situation indicates that the area has an important potential for botanical tourism. Accelerating botanical tourism activities in protected areas will increase the likelihood of success. Despite some problems in these areas, they will be the preferred choice due to their recognition and registration.

Thanks to new studies conducted daily, the records of flora belonging to countries, regions, and provinces are being updated. In our country, teams consisting of experts for each province are conducting inventory and monitoring studies on terrestrial and freshwater ecosystems' biological diversity. The findings are then entered into the Noah's Ark National Biodiversity database (Noah's Ark Database, 2023). Using the information obtained after completing all the studies is believed to contribute to structuring the Botanical Tourism activities.

Hattusa (Boğazköy), a cultural heritage site on the UNESCO World Heritage List, is very important for Çorum Tourism. The region is thought to gain an advantage if tour networks can be created in coordination with botanical tourism activities in the area. The studies so far have generally been carried out to determine ecotourism qualifications and have remained at the provincial level. For this reason, this study, which deals with the protected areas of the Central Black Sea Region, evaluates a wider area. Coordinated planning by establishing communication between the protected areas of different provinces will produce more effective results in tourism activities. It is thought that by ensuring the flow between tourism activities, an advantage will be provided in reaching the desired goal in botanical tourism and other types of eco-tourism.

Declaration

All authors of the article contributed equally to the article process. The authors have no conflicts of interest to declare.

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