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Turkey Plant Bank

Abstract

Duzenli, A. & Karaomerlioglu, D.: Turkey Plant Bank. — *Bocconea* 24: 239-242. 2012. — ISSN 1120-4060.

Botanical data in the development and creation of nature protection policy is one of the most important elements. Herbarium, museum and botanical gardens gives possibility plant visually to see and obtain information if they reach the ground. However plant banks provide both views the same thing on the screen in a very short time and able to gain relative-inquiring each other information about the plant or plants in intended area. Obtained this information contributes primarily to scientific research, to prepare of the EIA report, to create a resource base and current to environmental regulation and protection work, and to eliminate curiosity of them interested in plants. This Plant Bank has been built for the first time with all of these reasons by us. BOTANIC 2010 data base was created with the aim of actuating Plant Bank's and constituting and updating plant taxa existed as native and foreign plants in our country, and botanical features of these taxa. Pioneer of this data base was the plant of Eastern Mediterranean region which has the transition zone and the most plant diversity contains a large part of the Anatolian diagonal. This region includes up to 50% richness when it compares with plant diversity of Turkey. "Plant Bank" will be completed representing in also other regions in result of the continuation of data entry. These days, it has been came half-way point in the completion of The Plant Bank of Turkey.

BOTANIC 2010 Data Base includes 65 features for each taxon. These are: endemism, threatened categories, CITES-conservation status, monumental-medicinal-food-poisonous-alien-aromatic plants, habitat, locality, systematic features, social-syntaxonomic-ecological value, the distribution maps according to GPS coordinates, place and photos, etc. This is the first database that can be done relative-inquiring each other among all of these features of taxon/taxa.

Introduction

Turkey Plant Bank includes up to 50% of plant diversity of Turkey until now. This case has become a fundamental step to put forward plant diversity of these regions and to "Plant Bank" idea required to establish of "Turkey Plants Database". On a regional basis, the existence of so much detailed databases would result in the detection of taxa under threat in those areas, as well as the habitat types of taxa and threat factors affecting taxa. The use of the model created in this study is expected to be a cornerstone in nature preservation studies. Turkey Plant Bank's web addresses are www.turkiyeflorasi.com, www.turkiyeflorasi.net, www.turkiyeflorasi.org.

In order to Turkey Plant Bank study, database created namely BOTANIC 2010 (Duzenli & al. 2002). It is a new and effective method for use of plant data obtained. By transferring systematic and botanical 65 characteristics of the plant to a computer environment, the terms that represent synonymous and similar characteristics are transformed into single statements as far as possible. Thus, the data can be inquired relatively. Turkey Plant Bank has been built for the first time with all of these reasons by us.

Material and method

Plant Bank was designed for Turkey. A main page were planned to ease the use of the plant bank (Fig. 1). Thus, an intensive and time-consuming study was undertaken into to gather in a digital environment. It allows the researchers to enter include new data on the subject, to perform rapid and simultaneous searching, visualizing and documenting numerous data upon request. Botanists and software specialists worked in coordination for examining floristic, ecological bases, usage and conservation for the bank. The system which is observed from data entry to control and its persons are software specialist, botanist, data entry persons, data controllers and recorded data. The data are checked by botanists.



Fig. 1. Turkey Plant Bank web site and entry screen.

In our country and other countries there are floristic databases appeared to be similar Turkey Plant Bank. However, it takes part in geographic distribution in the country, habitat distribution and photographs in the other databases. In contrast, in floristic databases there are not existence features such as detailed information related to structural features and usage of plant in database and map display with GPS coordinates. BOTANIC 2010 database software constitutes basic of Turkey Plant Bank. The database has 65 different features (synonym, CITES-conservation-export status, monumental plants, useful plants, habitat, social-sintaxonomic-ecological value, map to GPS coordinates, photos, etc.). These features can be separately inquired and done relative-inquiring each other among all of these features of taxa. The data in this database has been entered as some codes and suitable with standards. Turkey Plant Bank is the first database done relative-inquiring each other among all of these features of taxa.

Turkey plant bank was started entering basic information in 11-volume book named Flora of Turkey and East Aegean Islands (Davis 1965-1988; Güner& al. 2000) to data base. Besides, the data which are obtained from many books, published/unpublished articles, theses and projects is entered in accordance with the rules of data entry.

Turkey Plant Bank screen can be reached to general information belong Turkey Plant Bank by “About Turkey Plant Bank” button and to the biographies of Project Manager (Prof. Dr. Atabay Duzenli) and Project Leader (Dr. Deniz Karaomerlioglu) in the main screen. Besides this screen has “About BOTANIC 2010“, “BOTANIC 2010 Manuel”, “History”, “Language of Plants”, “Membership” and “Contact Us”. It was mentioned from matter, purpose, scope and benefits of database which is base of Turkey Plant Bank by “About BOTANIC 2010” button. BOTANIC 2010 Manuel button is gives of user guide of database. Stages of Turkey Plant Bank from the beginning up to this day are explained under “History” button. “Language of Plants” button compiled for nature and plant lovers has addressed the issues used as a different language of smell and morphological characteristics of plants. By “Membership” button membership subscriptions are performed for database operations. In order to use Turkey Plant Bank subscribed by “Membership” button and program manager’s approval must be made. It can be reached to the authors from “Contact Us” button for answer the questions of researchers and enthusiasts.

Results

Turkey Plant Bank that can be separately inquired and done relative-inquiring each other among all of features of taxon/taxa has been built for the first time by us. Natinal Herbarium and museum newly built in Turkey. Turkey Plant Bank will be able to take part on this constitution. It is a basic source for nature and plant lovers and scientists.

Acknowledgements

This study was financially supported by Cukurova University the Academic Research Projects Units (FEF2008BAP7).

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