

PLANTS: A Source for Basic Plant Information

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Range managers will remember the National List of Scientific Plant Names (USDA, SCS 1982). This two volume document, known as the NLSPN and produced in cooperation with the Smithsonian Institution-Department of Botany, was the source for the alphanumeric plant symbols utilized by the discipline for range plant inventory. PLANTS has incorporated and updated the information contained within the NLSPN, plus expanded upon it with the cooperation of many individuals and institutions. The traditional plant symbols were retained from the NLSPN, except in cases of duplication and incorrect spelling of the scientific name.

The USDA, NRCS established the National Plant Data Center (NPDC) on the campus of Southern University in cooperation with the College of Agriculture and Home Economics. The NPDC is focusing resources on the development, acquisition, quality control, integration, and dissemination of plant information for the NRCS, its clients, cooperators, and the general public. This includes developing the PLANTS database.

PLANTS Home Page

<http://plants.usda.gov>

The NPDC provides information through two primary sources. One is via the Internet through the PLANTS Database Home Page on the World Wide Web. The other is via the Field Office Computing System (FOCS) that is established in the

3,000 NRCS Field Offices at the county level throughout the United States. Both sources utilize the same data set. There are many applications within the NRCS and Field Offices in particular that utilize these data. The disciplines utilizing this information for standardization and integration include the following: soils, range, water quality, biology, conservation and ecosystem assistance, national resource inventory, agronomy, forestry, plant materials, conservation engineering, and watershed planning.

Plants

Being a dynamic database, PLANTS permits the user to query the database with a particular scientific/common name or plant symbol. If the information provided is associated with a plant name that is currently recognized by PLANTS as a synonym, the database will provide the user with the currently accepted name and the information linked to it.

The NPDC staff work with cooperators situated in universities, institutions, organizations, and agencies nationally and internationally on the data that are served through the PLANTS database (USDA, NRCS 1996). Some of the primary cooperators include the following: Agricultural Research Service-Systematic Botany and Mycology Lab (Dr. John Wiersema); Alcorn State University (Dr. Suresh Tiwari); Biota of North America Project (Dr. John Kartesz); Botanischer Garten und Botanisches Museum-Berlin (Dr. Walter Berendsohn); Flora of North America (Dr. Nancy Morin); Missouri Botanic Garden (Dr. Marshall Crosby); North Carolina A&T University (Dr. Marihelen Glass); Royal Botanic Garden-Edinburgh (Dr. Richard Pankhurst); Southern Illinois University-Carbondale (Drs. Ray Stotler and Barbara Crandall-Stotler); Southern University (Dr. Bobby Phills); University of Colorado (Dr. William A. Weber); University of Nebraska-Omaha (Dr. Robert Egan), University of Wyoming-Rocky Mountain Herbarium (Dr. Ronald Hartman); and Utah State University-Intermountain Herbarium (Drs. Mary Barkworth and Leila Shultz).

PLANTS currently provides basic information such as the following:

- Scientific name
- Common name
- State distribution
- US nativity
- Growth form
- Wetland indicator status
- Noxious status
- Federal/State status
- References
- Plant images



The foundation of the PLANTS database is provided by a taxonomic backbone that has been developed by Drs. Kartesz (vascular plants), Egan (lichens), Crosby (mosses), and Stotler/Crandall-Stotler (liverworts and hornworts) in cooperation with others in the botanical community. The basis for this work are the checklists that have been or are being published by these authors. The attribute data are linked to this backbone. Major updates to the backbone occur annually, while minor updates and corrections are incorporated on a weekly basis. The backbone contains information on 45,000 currently accepted names and includes about 80,000 accepted and synonym names. PLANTS currently encompasses the United States, Puerto Rico, and the Virgin Islands. Work is underway in coopera-

tion with the Bishop Museum (Honolulu) to develop the foundation data for a checklist of the Pacific Basin focusing on the U.S. territories.

The PLANTS development plan includes making information accessible that is currently housed in the database, but not publicly accessible. These data include: 1) seventy plus characterization fields that currently address 2,500 species utilized in natural resources conservation uses; 2) expanded slate of plant images; and 3) crop-related data.

The NRCS and its cooperators are embarked upon a program to build additional functionality into PLANTS, plus develop and integrate additional data. This program is being directed by the needs of the users. There is a comment function on the Home Page and users are urged to provide us with comments, outlines of their plant information needs, and contribute to the current state of knowledge exhibited. Though in the formulation years, PLANTS is available to you, the user, today.

FOCS Plants


FOCS Plants is the module utilized by and accessible only to NRCS Field Offices. FOCS Plants currently provides a basic, standardized plant list along with various attributes pertaining to a particular species. Additionally, it provides data for Field Office applications, such as Grazing Land Administration (GLA), Revised Universal Soil Loss Equation (RUSLE), Wind Erosion Equation (WEQ), VegSpec, FOCS Soils, and FOCS Climate. As FOCS development evolves, it is planned to provide the Field Office with access to all of the information proposed for the PLANTS database.

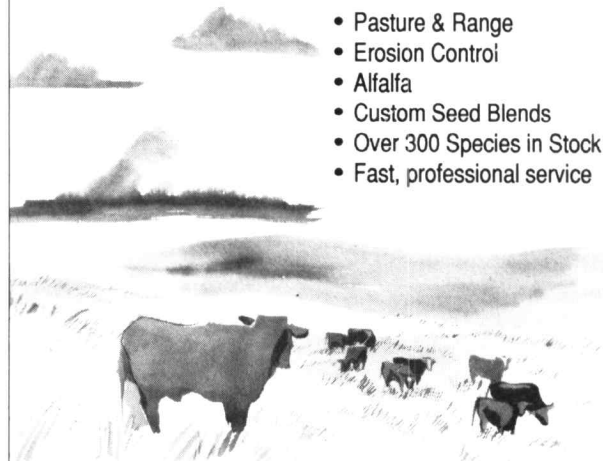
References Cited

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