

Part 401 – Plant List of Attributes, Names, Taxonomy, and Symbols (PLANTS) Database

401.0 Purpose

This directive sets forth NRCS policy for utilizing the PLANTS database.

401.1 Background

A. Standardized plant names, symbols, taxonomic concepts, and attributes are essential in the collection, processing, storage, integration, exchange, and retrieval of resource information used in all NRCS automatic data processing systems. The agency began maintaining a standardized plant list about 1960. In 1971, NRCS published a National List of Scientific Plant Names (NLSPN). This list was useful in preparing technical guides, handbooks, and soil surveys; in abstracting research documents; and in coordinating plant testing programs among States and regions.

B. In 1982, NRCS (in cooperation with the Smithsonian Institution) published the revised NLSPN. Selected taxonomists and botanists assisted the Smithsonian Institution scientists in revising the list. The revision, like the previous list, contained symbols for scientific names, accepted names for genus, species, subspecies, and varieties; authors of plant names; symbols for source manuals; family names; symbols for plant habits; and symbols for regions of distribution. This revision included a volume of accepted names and one of synonymy.

C. In 1990, NRCS initiated a continuation and expansion of the NLSPN in the form of the PLANTS database. It is a dynamic database that provides easy access to basic plant information, including online access. PLANTS provides data to NRCS applications in conservation planning, soils, range, agronomy, biology, and others. PLANTS contains information on common and scientific names, taxonomy, synonymy, distribution, nativity, characteristics, ethnoecology, wetland indicator status, legal status (e.g., species that are endangered and threatened, invasive, or noxious), and cover crops. It also includes interactive keys to plant taxa and a large number of images that facilitate plant identification. Each plant name is provided with a unique symbol. These data are developed in cooperation with plant scientists. Information within PLANTS encompasses the vascular and nonvascular plants of the United States and its territories and protectorates, as well as the rest of North America north of Mexico.

D. PLANTS is being utilized directly by most U.S. Federal agencies and provides information to the U.S. Integrated Taxonomic Information System (ITIS), which is providing a taxonomy for all biota in the United States. PLANTS enables the integration of natural resource information throughout NRCS and across other government agencies, disciplines, and applications.

401.2 Policy

It is NRCS policy to use the PLANTS database in all official activities requiring basic plant information, including conservation planning and ecosystem management.

401.3 Accessing PLANTS Information

The PLANTS database is currently accessible on the Internet at the following address: <http://plants.usda.gov>. Any suggestions to make the information of greater utility to the field office and its clients are encouraged. If you should have any questions about PLANTS, please contact your State PLANTS coordinator (see section 401.4).

- (1) Searches.—All data in PLANTS are accessible using the search options (advanced search, characteristics, classification, image gallery, threatened and endangered, wetland indicator) available on the PLANTS home page.
- (2) Web Services.—If Web services are needed for a particular application, please contact the National Plant Data Team (NPDT).

401.4 State PLANTS Coordinator

The State PLANTS coordinator serves as the liaison between the State and NPDT. The coordinator is designated by the State Conservationists or his/her delegate. The list of current State PLANTS coordinators is accessible via the PLANTS Web site. This liaison recommends improvements to NPDT for PLANTS and related applications, coordinates State comments and requests to NPDC, and maintains State common names and the State Grazing and Spatial Analysis Tool (GSAT) list.

401.5 Revision of PLANTS

A. NPDT is responsible for maintaining PLANTS so that it reflects current scientific knowledge and meets the needs of NRCS staff and other users.

- (1) General Updates.—All data within PLANTS are continuously updated by the NPDT.
- (2) Taxonomic Updates.—Updates to taxonomic groups are planned as new scientific information becomes available.
- (3) Distributional Data.—National, State, and county distributional data primarily are based directly or indirectly upon botanical specimens deposited in recognized herbaria. Additions to distributional data for a particular geographical entity (e.g., State or county) are based upon a known physical specimen, a specimen citation in a published document, or an observation.
- (4) Data Integrity.—NPDT works with the Information Technology Center, as well as national discipline leaders or their designated representatives, to maintain data integrity and security.

B. Contributing Data.—Suggested revisions, additions, or correction to the data (e.g., changes in taxonomy, addition of new species, distribution updates) in PLANTS can be submitted to NPDT for review.

- (1) Plant Fact Sheets and Plant Guides.—Plant fact sheets and guides are a coordinated effort between the Plant Materials Program and NPDT, with input from other cooperating organizations.
- (2) General Comments.—General comments can be submitted through the “Contact Us” link on the PLANTS home page.

401.6 Training

An introduction and tutorial to PLANTS can be found on the PLANTS Web site. State office training can also be requested through NPDT. Also available on the PLANTS home page are “Help” and “Frequently-Asked-Questions” sections.

401.7 Assignment of Symbols to Scientific Plant Names Not Currently Included in PLANTS

Some plant names needed in NRCS operations may not currently be contained within the PLANTS database and may not have a plant symbol assigned. After checking the PLANTS database, please submit the scientific name that needs a symbol to the NPDT or your State PLANTS coordinator.

401.8 Common (Vernacular) Name Assignment

Because a plant may go by different common names in different regions of the country, common names are not standardized. Each species can be assigned a common name for each State, although these may not appear on the species' profile page. This task is delegated to the State PLANTS coordinator by the State Conservationist.