NPFLORA USER'S MANUAL

The Geographic Information Systems Division, in the Natural Resources Directorate, National Park Service, serves as the central office for policy development and technical support in remote sensing and geographic information systems. The division provides technical assistance to parks, regions and Washington offices in acquiring and analyzing remotely sensed data and in constructing and operating geographic information systems data bases. The division administers the National Park Service's NPFLORA data base, and the development and management of certain other Servicewide biological inventory data bases, which reside in the COMMON data base and are geographically referenced. The division also develops and disseminates standards and guidelines for remote sensing and geographic information systems activities; provides technical consultation in hardware and software selection for remote sensing and geographic information systems applications and trains NPS personnel in remote sensing and geographic information systems theories and techniques. The division also develops, enhances and supports remote sensing and geographic information systems software for use in National Park Service applications and serves as the Service's primary liaison with the remote sensing and geographic information systems activities of other agencies, universities and other organizations.

Additional information and inquiries on the NPFLORA module of the COMMON data base system may be addressed to the NPFLORA Program Manager:

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NPFLORA USER'S MANUAL
for the
National Park System
Vascular Flora Data Base

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National Park Service
Geographic Information Systems Division

September 1989

CONTENTS

FIGURES

INTRODUCTION

The NPFLORA module of the COMMON data base system provides a Servicewide, single source for general information on the vascular flora of the national park system. In fact, the module contains a data base on all native and introduced (naturalized/exotic plants with self-sustaining, reproducing populations) vascular plants down to the infraspecies level (subspecies or variety) occurring in North America, Hawaii or the Caribbean region, whether occurring in national parks or not. NPFLORA includes information on taxonomy; regional distribution in North America, Hawaii and the Caribbean; plant origin (native or introduced); general habit descriptors; threatened and endangered status according to the U.S. Fish and Wildlife Service; national park system distribution and park botanical source citations used in the data base.

Park, regional office and Washington office (WASO) staff can run standard NPFLORA reports in COMMON's Report Library to obtain most of the data stored in the NPFLORA module. Users may also choose to produce individualized, or custom, reports that combine information from different COMMON modules, or answer simple questions in NPFLORA by employing basic RELATE 3000 commands.

The NPFLORA module was incorporated into the COMMON data base system in 1987, after five years of development and operation on a non-NPS computer system in Denver, Colorado. The NPFLORA Program Manager, Geographic Information Systems (GIS) Division, Natural Resources Directorate, manages the NPFLORA module from the GIS office in Denver. To date, all data have been entered by the GIS central office staff. However, COMMON provides the opportunity to share data entry responsibilities, but the NPFLORA Program Manager maintains quality assurance and data security.

NPFLORA is based on an original data base produced by the Smithsonian Institution under contract to the Soil Conservation Service, U.S. Department of Agriculture, and published in 1982 as "The National List of Scientific Plant Names," vol. 1 & 2, SCS-TP-159 (NLSPN). The NLSPN has generally served as the official source for acceptable scientific plant names, or taxa, used in the NPFLORA data base. However, another contemporary publication entitled "A Synonymized Checklist of the Vascular Flora of the United States, Canada, and Greenland" by John T. Kartesz and Rosemarie Kartesz (1980) has been used extensively to treat plant names that were reported by parks but were not adequately treated in the NLSPN. As other national floristic treatments are published, NPFLORA will be modified to reflect the most current comprehensive understanding of the nation's vascular flora.

In the past, the procedure used to enter park checklists into NPFLORA generally followed this pattern. Park staffs were initially contacted by the NPFLORA Program Manager or staff and asked to supply a copy of the most complete and current checklist of the vascular flora present at their park. These lists vary dramatically--from quite complete and modern checklists to very incomplete and outdated lists. Therefore, the data in NPFLORA must be viewed as incomplete, reflecting only the documented flora of the parks, because inventories are incomplete and some misidentification of plants has no doubt occurred. Credibility of the data rests with the original park botanical source citations which are referenced in the NPFLORA PARKREFS data file.

The second step in the process to enter park checklists into NPFLORA involved the verification of park source plant names as acceptable plant names in the NLSPN. To make the plant names more modern and standard according to the NLSPN required changing certain plant names from the original park source documents. A manual record of these changes has been maintained and will be incorporated into NPFLORA in the future. For many parks, a few old synonyms remain unknown and are not listed in NPFLORA. Many of these are undoubtedly typographical errors which could not be resolved by the NPFLORA Program Manager or by park staffs when they were requested to review printouts of their park checklists.

Coding of acceptable plant names and data entry followed the verification process. Coding involves determining the unique "symbol" for each plant name to be entered. This symbol is the data element that is integral to most data files within NPFLORA and can be up to 7 characters long. The first NPFLORA standard report in the COMMON Report Library allows the user to determine the correct symbol for any acceptable species or infraspecies name (see discussion on Report No. F1 beginning on page 17).

Finally, draft printouts from the data base were compared to the original park botanical sources by NPFLORA staff to assure accurate data entry. Final printouts were then mailed to the parks for review, update and use. Selective queries of the data base were also performed in response to specific park requests.

Today, because of COMMON, park staffs may enter plant records for their specific parks using the PARKREFS and TAXPARK data entry screens and files (see page 5). However, before these records are permanently added to the NPFLORA data base, they are reviewed and approved by the NPFLORA Program Manager. No changes to the data base are permitted without first entering an acceptable park botanical source citation in the PARKREFS file and providing a hard copy of this documentation, signed by the Superintendent, to the NPFLORA Program Manager.

Parks are encouraged to update their respective NPFLORA data using COMMON directly or, if necessary, to send updates to the NPFLORA Program Manager for data entry as time permits (see inside front cover for Program Manager's address and phone numbers). Only through such updates can NPFLORA provide the most current and accurate information on the flora of the national park system.

Currently, the NPFLORA module is comprised of 11 different data files. These data files are briefly described on the opposite page and in the on-line HELP feature of COMMON. (Changes will occur in the future, so for the most current description of NPFLORA data files, examine information in the HELP feature of NPFLORA.)

While there are 11 NPFLORA data files, the typical user will not be aware of them. Your interface with NPFLORA is with two different data entry screens (PARKREFS AND TAXPARK) and three standard reports (F1, F2 and F3). Each of these combines data from two or more data files but this is transparent to you, the user. Only when you want to do your own individualized report will you need to know exactly what the data files are and what data fields are in each file. Only the NPFLORA Program Manager has the ability to modify data in the other data files, but information contained within these files is provided in the standard reports. For a description of the data fields within the data entry screens, see page 10 and pages 12-13.

NPFLORA DATA FILES (as of September 1989)

1.	DISTRIBS	Regional Distribution Decode File
2.	FAMILIES	Family Name & Upper Level Taxonomy
3.	FLORPEST	Crosswalk Between NPFLORA & PESTS Modules
4.	GENERA	Genus Name, Author, Genus Symbol, Family Number
5.	HABITS	Plant Habit (Characterization) Decode File
6.	INFRAS	Plant Infraspecies Taxonomic Information
7.	PARKREFS	Park Botanical Source Citation Numbers
8.	TAXA	Plant Species Taxonomic Information & Origin
9.	TAXPARK	Plant Occurrences in National Park System Units
10.	TAXREFS	Park Botanical Source Citations
11.	TXHABDST	Plant Habit & Region Distribution

Before beginning to use the NPFLORA module for the first time, you may want to review the general COMMON User's Guide for information on how COMMON works, how to use data entry screens, etc. Copies should be available in each park and regional office.

The *NPFLORA User's Manual* consists of two major sections. The Data Entry section addresses how you add new plant records from your park to the NPFLORA data base, or how you view or update existing records. The Data Reports section discusses the standard and individualized reports that are available for retrieving data in NPFLORA.

The following instructions take you step-by-step through the NPFLORA module, first adding new plant records from your park and then viewing or updating existing records. Each data entry screen that you will encounter through the data entry process has been exactly duplicated in the user's manual from the data base.

The instructions also take you through creating the three standard reports that are available for retrieving data from NPFLORA. General instructions are also presented for preparing an individualized report. This activity, however, requires a working knowledge of the RELATE 3000 software language.

Refer to the COMMON User's Manual for getting into the COMMON data base system.

DATA ENTRY

This section discusses how you would add new plant records from your park to the NPFLORA data base. You can enter records but they are not permanent changes to the data base until the NPFLORA Program Manager officially accepts the new entries and updates. A copy of the park botanical source document with accompanying memorandum from the Superintendent must be sent to the NPFLORA Program Manager before permanent changes to NPFLORA will be approved. The section also discusses viewing or updating existing records from your park.

The following information will be required for data entry:

1. Park Botanical Source Citation

2. Source Number (partially system generated)

3. Plant Symbol

4. Park Alpha Organization Code

5. Is plant native or introduced in your park? (N or I)

6. Is plant endemic to the park? (Y/N)

7. Is plant disjunct at the park? (Y/N)

8. Is plant extirpated in park? (Y/N)

9. Is there an herbarium specimen of the plant from the park? (Y/N)

Adding new plant records for your park involves using two different data entry screens: (1) PARKREFS and (2) TAXPARK. The PARKREFS data entry screen is used to enter a park botanical source citation for a new plant record. The TAXPARK data entry screen is used to record the park-specific information on each vascular plant.

PARKREFS AND TAXPARK DATA ENTRY SCREENS

When you first sign-on to the COMMON data base system, you will see the COMMON main menu (Figure 1). This menu is both the first and last menu you come to while using COMMON.

Figure 1. COMMON Main Menu

```
HELLO AND WELCOME TO THE NATIONAL PARK SERVICE
COMMON DATA BASE.  COMMON INCLUDES A VARIETY OF
FREQUENTLY REQUESTED INFORMATION ABOUT PARK
UNITS SERVICEWIDE.

WOULD YOU LIKE TO:  __

ENTER NEW DATA OR UPDATE
OR DELETE EXISTING DATA?                              ENTER (1)

USE THE COMMON REPORT LIBRARY
TO RUN A STANDARD REPORT?                             ENTER (2)

RUN YOUR OWN INDIVIDUALIZED REPORT?                   ENTER (3)

PROCEED DIRECTLY TO DATA FILE SELECTION?              ENTER (4)

USE THE IPM DECISION TREE?                            ENTER (5)

EXIT FROM THE COMMON DATA BASE?                       ENTER (X)
```

To enter data on a new plant record for your park, **enter 1 and press RETURN**. The screen in Figure 2 will appear.

NOTE: Once you become familiar with COMMON, it will be more efficient to select option 4 on the main menu, "PROCEED DIRECTLY TO DATA FILE SELECTION?". If you enter 4, then the screen in Figure 4 will appear.

6

Figure 2. Introduction to COMMON Data Base System Organization Screen

```
                    COMMON DATA BASE
              DATA ENTRY, UPDATE, AND DELETION

IN ORDER TO ENTER, UPDATE OR DELETE DATA IN THE COMMON
DATA BASE, YOU SHOULD HAVE SOME FAMILIARITY WITH THE
BASIC ORGANIZATION OF THE DATA BASE.  YOU ALSO SHOULD
BE AWARE OF WHICH DATA IN THE DATA BASE YOUR USER-ID
HAS ACCESS TO - FOR DATA ENTRY, UPDATE OR DELETION.

CONSULT YOUR COMMON USER'S MANUAL IF YOU HAVE QUESTIONS.

        WOULD YOU LIKE TO: _____

GET INTRODUCTORY INFORMATION ON HOW THE COMMON
DATA BASE IS ORGANIZED?                            ENTER (1)

PROCEED TO ENTER, UPDATE OR DELETE DATA?           ENTER (2)

EXIT TO COMMON'S MAIN MENU?                        ENTER (X)
```

NOTE: If you enter 1, you will get information on all the various modules within the COMMON data base system.

To begin entering data, **enter 2 and press RETURN**. The screen shown in Figure 3 will then appear.

Figure 3. Instructions for Data Entry Selection Screen

```
        WOULD YOU LIKE TO : ___

SEE INSTRUCTIONS ON HOW TO ENTER,
UPDATE OR DELETE DATA?                             ENTER (1)

BEGIN ENTRY/UPDATE/DELETE?                         ENTER (2)

EXIT TO PREVIOUS MENU?                             ENTER (X)
```

To begin entering data, **enter 2 and press RETURN**. The screen in Figure 4 will then appear.

Figure 4. Data File Selection Screen

```
ENTER THE NAME OF THE DATA FILE FOR WHICH YOU
WOULD LIKE TO ENTER, UPDATE OR DELETE DATA.

              _____

     (ENTER 'X' TO RETURN TO PREVIOUS MENU)
     (ENTER 'H' FOR COMMON FILE NAME HELPS)
```

To begin entering new plant records, you must first enter a proper bibliographic citation for the source of the record(s). **Enter PARKREFS, and press RETURN**. The Figure 5 screen will appear.

Figure 5. PARKREFS Citation Entry Screen

```
            NATIONAL PARK SERVICE COMMON DATABASE

            TAXONOMIC REFERENCE INFORMATION      MODULE:  NPFLORA
                                                 DATA FILE: TAXREFS
                                                            PARKREFS

   PARK ALPHA ORG CODE: _____          SOURCE: ____ - __

          REFERENCE YEAR: _____

                       (USE TAB KEY TO MOVE BETWEEN LINES)
   REFERENCE:    (PLEASE AVOID BREAKING WORDS BETWEEN LINES)

              _____

              _____

              _____

              _____

   E = ENTER NEW RECORD       V = VIEW RECORD    U = UPDATE RECORD  H = HELP
   D = DELETE RECORD          C = CLEAR SCREEN    X = EXIT           _ = SELECTION
```

To begin entering a citation, **enter E**. An example of a PARKREFS citation, and an explanation of each data field on the above screen, are on page 10.

No changes to the NPFLORA data base can be made without proper documentation. Before you can enter new plant records for a park, a bibliographic citation must be provided and the "source number" generated. This number is a unique identifier for a specific source-plant name-park citation. The source number is generated by the system, with the exception of the last digit which is used to classify the type of reference given. You must enter one of the following codes to classify the reference.

REFERENCE TYPE CLASSIFICATION SCHEME

0 = undetermined, no classification
(default)

1 = peer reviewed, published scientific literature
(refereed journal articles and books)

2 = Non-peer reviewed, published scientific literature
(non-refereed, journal articles and books)

3 = Peer reviewed, non-published scientific literature
(theses, dissertations)

4 = Non-peer reviewed, non-published scientific literature reported by NPS contracted,
qualified botanists

5 = Non-peer reviewed, non-published literature
(reports, manuscripts, lists, environmental documents, memos, letters)

Remember, always use the TAB key to move between data fields and avoid breaking words between lines in the citation. Verify the accuracy of the citation record entered and when satisfied of its correctness, press the RETURN key. A system message will appear at the bottom of the screen indicating that the record has been created.

> ** Before leaving this screen, note the SOURCE **
> number since it will be required for further
> data entry.

HELP is available for PARK ALPHA ORG CODE and SOURCE if "H" is entered as the SELECTION, or if "H" is entered in a particular data field.

If you want to View a record, select V and then enter the PARK ALPHA ORG CODE and SOURCE (number), and press RETURN. The full citation for that specific record will appear on the screen.

If Update is desired, follow the above procedure to view the record and then select U. Using the TAB key, move through the record to the appropriate location and enter the correct information. Then, after all the necessary corrections are made, press RETURN and a system message at the bottom of the screen will indicate that the new record has been updated. You must view a record before you can update the existing record.

Figure 6 shows an actual bibliographic citation record (SOURCE: 165-1) for Theodore Roosevelt National Park.

Figure 6. An Example of PARKREFS Citation
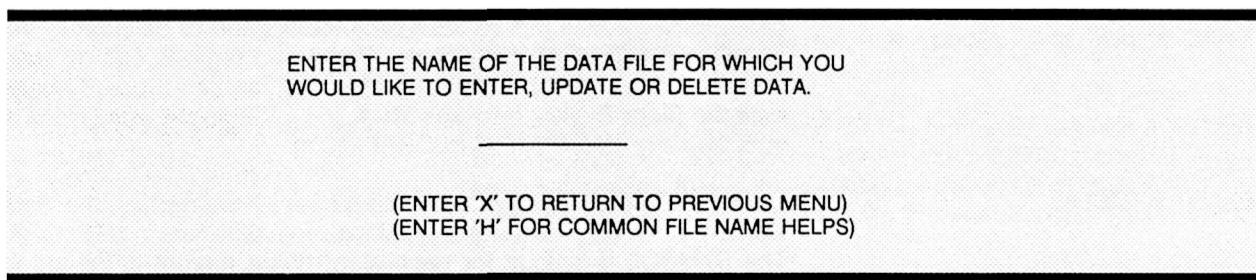
NATIONAL PARK SERVICE COMMON DATABASE

TAXONOMIC REFERENCE INFORMATION   MODULE: NPFLORA
                                         DATA FILE: TAXREFS
                                                      PARKREFS

PARK ALPHA ORG CODE: THRO   SOURCE: 165 - 1

     REFERENCE YEAR: 1984

                         (USE TAB KEY TO MOVE BETWEEN LINES)
REFERENCE: (PLEASE AVOID BREAKING WORDS BETWEEN LINES)

Hansen, Paul L., George R. Hoffman and Ardell J. Bjugstad. October 1984. The Vegetation of the Theodore Roosevelt National Park, North Dakota: A Habitat Type Classification, USDA Forest Service. Rocky Mountain Forest and Range Experiment Station. Ft. Collins, Colorado. Technical Report RM-113. Appendix 1. Tables A1-A9.

E = ENTER NEW RECORD   V = VIEW RECORD   U = UPDATE RECORD   H = HELP
D = DELETE RECORD   C = CLEAR SCREEN   X = EXIT   = SELECTION

PARKREFS DATA FIELD EXPLANATION
(for Figures 5 and 6)

PARK ALPHA ORG CODE: Mandatory-4 characters; this is the park 4-letter alpha organization code. This code is also checked against the park's or region's user-ID for data entry access. Park staff can enter information for their park only and regional staff for the parks in their region only. COMMON will give an error message at the bottom of the screen if the ALPHACD is not an accepted alpha organization code. Within the data file, the specific data field is called ALPHACD.

SOURCE: The SOURCE number is the plant name-park reference ID number. Mandatory-4 characters; this is a unique, system-generated number which links all plant names entered into NPFLORA with the specific park reference documenting their occurrence at that park. The fourth digit is the reference type classification digit and can only be 0-5 (see page 9 for definitions of the six classes). Within the data file, the specific data field is called PARKSOURCE.

REFERENCE YEAR: Mandatory-4 characters; this is the year that the reference was written. Within the data file, the specific data field is called REFYR.

REFERENCE: (Reference Text) Mandatory-72 characters; this is a formal citation for the source used to document the occurrence of the plant names entered into NPFLORA. It should include all pertinent information useful in fully and uniquely identifying the source. Memoranda under the Superintendent's name should also include the responsible staff person's name and job title. Within the data file, the data field is called REFTEXT.

Now, **enter an X** to exit the PARKREFS screen (Figure 5). The next screen (Figure 7) will appear.

Figure 7. Data File Selection Screen
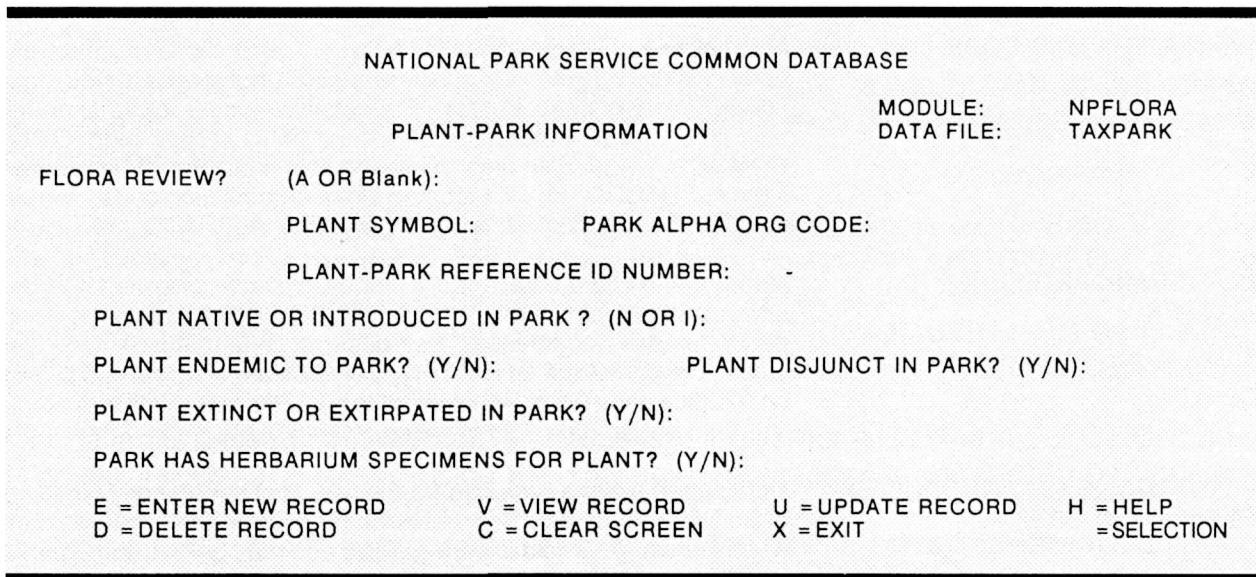
ENTER THE NAME OF THE DATA FILE FOR WHICH YOU
WOULD LIKE TO ENTER, UPDATE OR DELETE DATA.

_____

(ENTER 'X' TO RETURN TO PREVIOUS MENU)
(ENTER 'H' FOR COMMON FILE NAME HELPS)

Enter **TAXPARK** as the name of the data file you would like to access, and **press RETURN**. The screen in Figure 8 will appear.

Figure 8. Plant-Park Information Data Entry Screen

NATIONAL PARK SERVICE COMMON DATABASE

| | MODULE: | NPFLORA |
| PLANT-PARK INFORMATION | DATA FILE: | TAXPARK |

FLORA REVIEW?   (A OR Blank):

PLANT SYMBOL: PARK ALPHA ORG CODE:

PLANT-PARK REFERENCE ID NUMBER: -

PLANT NATIVE OR INTRODUCED IN PARK ? (N OR I):

PLANT ENDEMIC TO PARK? (Y/N):   PLANT DISJUNCT IN PARK? (Y/N):

PLANT EXTINCT OR EXTIRPATED IN PARK? (Y/N):

PARK HAS HERBARIUM SPECIMENS FOR PLANT? (Y/N):

E = ENTER NEW RECORD   V = VIEW RECORD   U = UPDATE RECORD   H = HELP
D = DELETE RECORD   C = CLEAR SCREEN   X = EXIT   = SELECTION

To begin entering plant names for your park, **enter E.**

Note: Specific existing records can also be Viewed, Updated or Deleted using this
             screen. Various data fields for each record in this screen are described on
             the following pages.

TAXPARK DATA FIELD EXPLANATION
(for Figure 8)

FLORA REVIEW? (A OR Blank): Indicates WASO Review of Record: 1 character; this is a security measure where the NPFLORA Program Manager is the only one who can approve a new record addition, modification or deletion to the permanent NPFLORA data base. Parks and regions can do data entry and view their changes but no one else can view those changes until the Flora Review field has an <u>A</u> in it. Within the data file, the specific data field is called FLORAPPROV.

PLANT SYMBOL: Unique identifier for plant name. Mandatory-7 characters; this data element is the common element linking most data files in NPFLORA. The SYMBOL is unique for each plant name (taxon) accepted in NPFLORA and is derived by combining the first 2 letters of the genus with the first 2 letters of the specific epithet, e.g., for *Acer rubrum* the symbol is ACRU, and where applicable, the first letter of the infraspecies name, e.g., for *Acer rubrum* var. *trilobum* the symbol is ACRUT. Where duplication occurs, consecutive numbers beginning with 2 are appended as a suffix to the alpha symbols, e.g., for *Acer saccharum* var. *glaucum* the symbol is ACSAG for *Acer saccharum* ssp *grandidentatum* the symbol is ACSAG2. If you want to look up the SYMBOL of a particular plant name, it can be found in the first standard report (FI) in the COMMON Report Library (see page 16). Within the data file, the specific data field is called SYMBOL.

PARK ALPHA ORG CODE: Mandatory-4 characters; this is the park 4-letter alpha organization code. This code is also checked against the park's or region's user-ID for data entry access. Park staff can enter information for their park only and regional staff for the parks in their region only. COMMON will give an error message at the bottom of the screen if the ALPHACD is not an accepted alpha organization code. Within the data file, the specific data field is called ALPHACD.

PLANT-PARK REFERENCE ID NUMBER: Mandatory-4 characters; this is a unique, system-generated number which links all plant names entered into NPFLORA with the specific park reference documenting their occurrence at that park. The last digit to the right is the reference type classification digit and can only be 0-5 (see page 9 for definitions of the six classes). Within the data file, the specific data field is called PARKSOURCE.

PLANT NATIVE OR INTRODUCED IN PARK ? (N OR I): 1 character; this is a data field for the park staff to enter an <u>N</u> (native) or an <u>I</u> (introduced) for the status of the plant in their specific park when known. This field is park specific and may be N in some parks and I in others for the same plant. This data field is particularly informative when dealing with plants that are native to North America but introduced through part of their distributional ranges. When a species is introduced to North America, all park occurrences will likewise be introduced. Within the data file, the specific data field is called STATUSPARK.

PLANT ENDEMIC TO PARK? (Y/N): 1 character; this is a data field for the park staff to enter a <u>Y</u> (Yes) or a <u>N</u> (No) to indicate that the plant being recorded is distributionally restricted to the park and its immediate vicinity, i.e., the plant's total worldwide distribution is within the park and the surrounding 20-mile area (arbitrarily defined). This type of population is biologically significant and would represent a significant resource of the park. Within the data file, the specific data field is called ENDEMIC.

PLANT DISJUNCT IN PARK? (Y/N):	1 character; this is a data field for the park staff to enter a Y (Yes) or a N (No) to indicate that the plant being recorded represents a population which is geographically isolated from the main distribution of the species. The required degree of geographical isolation is subjective and varies with the plant, but the population should be reproductively isolated forming a separate deme in order to be characterized as a disjunct population. This type of population is biologically significant and would represent a significant resource of the park. Within the data file, the specific data field is called DISJUNCT.
PLANT EXTINCT OR EXTIRPATED IN PARK? (Y/N):	1 character; this is a data field for the park staff to enter a Y (Yes) or a N (No) to indicate that the species being recorded is an historical record, that is the plant no longer exists at least within the park boundaries. Within the data file, the specific data field is called XTINCXTIRP.
PARK HAS HERBARIUM SPECIMENS FOR PLANT? (Y/N):	1 character; this is a data field for the park staff to enter a Y (Yes) or a N (No) to indicate that the species being recorded is documented by an herbarium specimen either at the park or at another known herbarium location. This is merely a quick check on the existence of a specimen; the details of the specimen including its location should be documented in the Park Service's Automated National Catalog System (ANCS). Within the data file, the specific data field is called HERBARIUM.

When all of the data for a TAXPARK record has been entered and checked for accuracy, **press the RETURN** key. A system message will appear at the bottom of the screen stating that the record has been created. Additional records are entered in the same fashion, one at a time.

If you want to View or Update a record, the following procedure is used. Enter **V** to view a specific record for the park. The cursor will then move to "PLANT SYMBOL" and the SYMBOL must be entered by the user. Next, the "PARK ALPHA ORG CODE" must be given and then finally, the "PLANT-PARK REFERENCE ID NUMBER" must be entered. At this point, **press the RETURN** key and the entire record stored in NPFLORA will appear.

If updating is desired, follow the above steps and then **enter a U** in the "SELECTION" box. Proceed through the record using the TAB key until you get to the field to be updated. (Note that moving through the data fields with the TAB key does not affect any of the current record.) At the appropriate place, type in the new or corrected information using the TAB key to go from entry to entry. When the record has been completed and checked for accuracy, **press the RETURN** key and COMMON will send a message stating that the record has been updated.

Enter an X to exit the TAXPARK screen (Figure 8). Continue entering an X until you are at the COMMON main menu (see Figure 1). From this point, you can exit COMMON, or make another selection for other COMMON activities.

DATA REPORTS

This section discusses the COMMON Report Library of standard reports that are available to the user without knowing any of the RELATE 3000 command language or syntax. Much of the data in the NPFLORA data base can be retrieved by using one of these reports, although the report format and informational content are fixed. The reports do, however, actually query the data base's current status so that reports do, in fact, reflect the exact content of the data base at the time the report is prepared.

Currently, three standard reports are available, but more will be added in the future. If you have a recurring need for a report from NPFLORA, please contact the NPFLORA Program Manager and it may be added to the COMMON Report Library.

STANDARD REPORTS

When you first sign-on to the COMMON data base system, the COMMON main menu appears (Figure 9).

Figure 9. COMMON Main Menu

```
HELLO AND WELCOME TO THE NATIONAL PARK SERVICE
COMMON DATA BASE.  COMMON INCLUDES A VARIETY OF
FREQUENTLY REQUESTED INFORMATION ABOUT PARK
UNITS SERVICEWIDE.

WOULD YOU LIKE TO:  __

ENTER NEW DATA OR UPDATE
OR DELETE EXISTING DATA?                        ENTER (1)

USE THE COMMON REPORT LIBRARY
TO RUN A STANDARD REPORT?                       ENTER (2)

RUN YOUR OWN INDIVIDUALIZED REPORT?             ENTER (3)

PROCEED DIRECTLY TO DATA FILE SELECTION?        ENTER (4)

USE THE IPM DECISION TREE?                      ENTER (5)

EXIT FROM THE COMMON DATA BASE?                 ENTER (X)
```

To run one of the standard reports for NPFLORA, **enter 2 and press RETURN**. The next screen (Figure 10) will appear.

15

```
          THIS IS THE COMMON REPORT LIBRARY.  YOU MAY
          SELECT AND RUN A VARIETY OF REPORTS FROM THE
          COMMON DATA BASE.  REPORT FORMATS HAVE BEEN
          PRE-PREPARED TO SAVE YOU TIME.

          ARE YOU INTERESTED IN REPORTS RELATING TO:
          (PRESS RETURN FOR NEXT PAGE MENU IF IT EXISTS)

   CULTURAL RESOURCES-RELATED PARK INFORMATION?                    ENTER (1)

   GENERAL OR ADMINISTRATIVE-TYPE PARK INFORMATION?                ENTER (2)

   NATIONAL NATURAL LANDMARKS-RELATED INFORMATION?                 ENTER (3)

   NATURAL RESOURCES ASSESSMENT-RELATED INFORMATION?               ENTER (4)

   NATURAL RESOURCES-RELATED PARK INFORMATION?                     ENTER (5)

   NPFLORA (PARK FLORA) INFORMATION?                               ENTER (6)

   NPS PERSONNEL DIRECTORY INFORMATION?                            ENTER (7)

   EXIT TO COMMON'S MAIN MENU?                                     ENTER (X)
```

Now **enter 6** to see the various standard reports that are available in the NPFLORA module. The following screen (Figure 11) will appear.

Figure 11. NPFLORA Report Choice Menu

```
                        COMMON REPORT LIBRARY

     THE FOLLOWING STANDARD REPORTS CAN BE RUN FOR:  NPFLORA (PARK FLORA)


     REPORT NO.          REPORT TITLE

        F1               NPFLORA Species Symbols Report
        F2               Park Checklist of Vascular Flora
        F3               Individual Plant Species Distribution



   WOULD YOU LIKE TO:                        ENTER REPORT NO.
      (1) RUN ONE OF THE REPORTS?               (2) SEE NEXT PAGE OF TITLES?
      (3) SEE PREVIOUS PAGE OF TITLES?          (4) EXIT TO REPORT LIBRARY MENU?
      (5) SEE REPORT DESCRIPTIONS?              (X) EXIT TO COMMON'S MAIN MENU?
```

If you would like to see a brief description of each of the standard reports available, **enter 5 and press RETURN**. Currently, only three reports are available and their descriptions are shown in Figure 12.

REPORTS FOR: NPFLORA (PARK FLORA)

REPORT NO.   REPORT TITLE

F1   NPFLORA Species Symbols Report

DESCRIPTION: Allows user to find Species Symbol for plant of interest, or
all valid species & infraspecies w/in a given genus

F2   Park Checklist of Vascular Flora

DESCRIPTION: Park listing of family, species, symbol and park sources ord-
ered phylogenetically or alphabetically by family or genus

F3   Individual Plant Species Distribution

DESCRIPTION: Gives data on specific plant including species name, author,
origin (N/I), regional distribution, and park occurrences

WOULD YOU LIKE TO:
(1) RUN ONE OF THE REPORTS?   (2) SEE NEXT PAGE OF DESCRIPTIONS?
(3) SEE PREVIOUS PAGE DESCRIPTIONS?   (4) EXIT TO REPORT LIBRARY MENU?
(X) EXIT TO COMMON'S MAIN MENU?

Figure 12. Description of Each Standard Report (F1, F2, F3)

After determining which report is wanted from the menu, **enter 1. Then select the report desired: F1, F2 or F3 and press RETURN.** Do not use the function keys for this purpose.

Report No. F1 - NPFLORA Species Symbols Report

This report provides the on-line user with Species Symbols which are required to do most activities within NPFLORA. (Each park might want to make a hard copy of the F2 report listing the park's species and their respective symbols to avoid having to run this report every time the data base is used.)

This standard report provides the following:

1.   species name
2.   species symbol
3.   species author
4.   infraspecies names (if any)
5.   infraspecies symbols
6.   infraspecies authors

Figure 13 is the first selection screen for Report No. F1.

Figure 13. Report No. F1 - Selection Screen

```
                    NATIONAL PARK SERVICE COMMON DATA BASE
                          NPFLORA SPECIES SYMBOLS
                        (ENTER 'H' FOR HELP OR 'X' EXIT)


        TO SEE SYMBOLS FOR ALL SPECIES IN A SELECTED GENUS, ENTER
        GENUS SYMBOL ONLY.

        TO SEE SYMBOLS FOR ONLY SPECIES BEGINNING WITH CERTAIN
        LETTERS IN A SELECTED GENUS, ENTER THE GENUS SYMBOL AND
        THE FIRST THREE LETTERS OF THE SPECIFIC EPITHET.


            GENUS SYMBOL:              SPECIFIC EPITHET:




        * NOTE - USE 'CNTL Y' TO STOP DISPLAY AFTER ANY PAGE *
```

You must enter the Genus Symbol first. The Genus Symbol can be found in Appendix 1 of this manual. It can also be found by using the on-line HELP file, where you would **enter an H** in the Genus Symbol data field. Using the on-line HELP feature provides the most current listing of acceptable genera and symbols. The HELP screen (Figure 14) looks like this:

Figure 14. Report No. F1 - HELP Screen

```
                    NATIONAL PARK SERVICE COMMON DATA BASE


        FOR:  PLANT GENUS SYMBOL


        IF YOU WISH TO SEE ALL ITEMS AND THE CORRESPONDING CODES,
        PRESS (RETURN).


        IF YOU WISH TO LIMIT THE DISPLAY TO ITEMS WHICH BEGIN
        WITH A PARTICULAR LETTER, ENTER THE LETTER: ___
```

If you are interested in determining the Genus Symbol for a genus beginning with "C", enter **C** and the output would look like Figure 15.

```
                    NATIONAL PARK SERVICE COMMON DATA BASE
                         DATA ELEMENT CODE DEFINITIONS


         CODE                    NAME

       CALLI3            CALLIRHOE
       CALLI4            CALLISIA
       CALLI5            CALLISTEMON
       CALLI6            CALLITRICHE
       CALLI7            CALLITRIS
       CALLU             CALLUNA
       CALOC             CALOCHORTUS
       CALOP             CALOPHYLLUM
       CALOP2            CALOPOGON
       CALOP3            CALOPOGONIUM
       CALOT             CALOTROPIS
       CALTH             CALTHA
       CALYC             CALYCADENIA
       CALYC5            CALYCANTHUS
       CALYC2            CALYCOCARPUM

   Press RETURN for NEXT PAGE (or) Enter 'X' TO EXIT from screen
                                                SELECTION:
```

The Genus Symbol is produced by using the first 5 letters of the genus name. Where duplication occurs, a consecutive number is added to the end of the 5 letters (for example, CALOP=Calophyllum; CALOP2=Calopogon; CALOP3=Calopogonium). For instances where there are fewer than 5 letters in the genus name, a "+" is added to the end of the genus name for each missing letter (for example, ACER+, IVA++, etc.).

Enter X to return to the Report No. F1 selection screen (Figure 16).

Figure 16. Report No. F1 - Selection Screen

```
                    NATIONAL PARK SERVICE COMMON DATA BASE
                           NPFLORA SPECIES SYMBOLS
                       (ENTER 'H' FOR HELP OR 'X' EXIT)


        TO SEE SYMBOLS FOR ALL SPECIES IN A SELECTED GENUS, ENTER
        GENUS SYMBOL ONLY.

        TO SEE SYMBOLS FOR ONLY SPECIES BEGINNING WITH CERTAIN
        LETTERS IN A SELECTED GENUS, ENTER THE GENUS SYMBOL AND
        THE FIRST THREE LETTERS OF THE SPECIFIC EPITHET.


            GENUS SYMBOL:  CERCI2          SPECIFIC EPITHET:



        * NOTE - USE 'CNTL Y' TO STOP DISPLAY AFTER ANY PAGE *
```

If you want to see all plant names (species and infraspecies) accepted in NPFLORA for a particular genus, **enter the Genus Symbol and press RETURN**. Frequently, many successive screens will need to be reviewed but for this example, we will look at a simple single screen case (Figure 17) of all the accepted plant names for the genus *Cercis* (Redbud) where CERCI2 is the Genus Symbol. Figure 17 is the output from Figure 16.

Figure 17. Report No. F1 - Output
NPFLORA Accepted Plant Names for the Genus Cercis

```
                NATIONAL PARK SERVICE COMMON DATA BASE        9/18/87
                       NPFLORA SPECIES SYMBOLS

    SPECIES:  CERCIS CANADENSIS                        SYMBOL:      CECA4

        SPECIES AUTHOR:  L.
        INFRASPECIES:
                    VAR MEXICANA                                    CECAM

        INFRA AUTHOR:  (ROSE)M. HOPK.
                    VAR TEXENSIS                                    CECAT

        INFRA AUTHOR:  (S. WATS.)M. HOPK.

    SPECIES:  CERCIS OCCIDENTALIS                      SYMBOL:      CEOC3

        SPECIES AUTHOR:  TORR.  X GRAY
        INFRASPECIES:
                    VAR ORBICULATA                                 CEOCO

        INFRA AUTHOR:  (GREENE)TIDEST.

    PRESS ANY KEY TO CONTINUE.
```
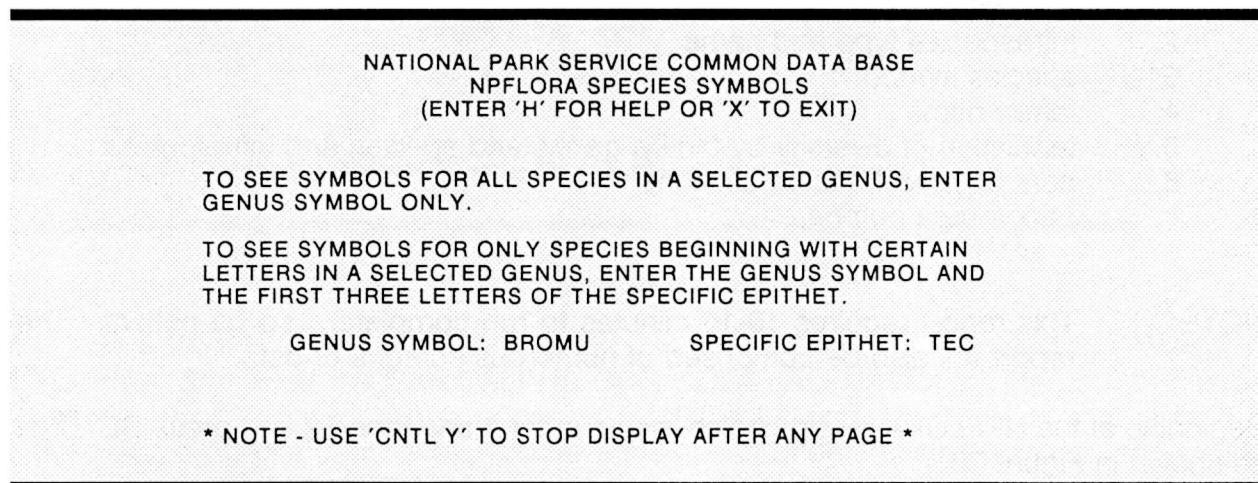
If you now want to proceed to obtain more information about a particular species or infraspecies, be sure to note the correct SYMBOL for the plant of interest.
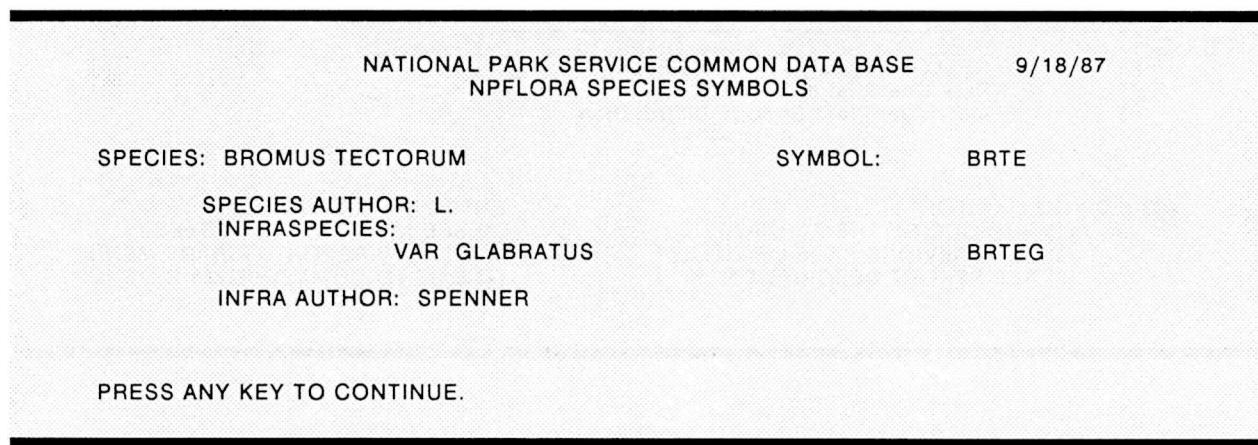
To find the Species Symbol for a particular plant, you must enter the Genus Symbol and then the first three (3) letters of the specific epithet, i.e., the second word in the scientific name. For cheat grass (*Bromus tectorum*), the screen would appear like the following (Figure 18):

Figure 18. Report No. F1 - Selection for Bromus tectorum

```
              NATIONAL PARK SERVICE COMMON DATA BASE
                       NPFLORA SPECIES SYMBOLS
                  (ENTER 'H' FOR HELP OR 'X' TO EXIT)


        TO SEE SYMBOLS FOR ALL SPECIES IN A SELECTED GENUS, ENTER
        GENUS SYMBOL ONLY.

        TO SEE SYMBOLS FOR ONLY SPECIES BEGINNING WITH CERTAIN
        LETTERS IN A SELECTED GENUS, ENTER THE GENUS SYMBOL AND
        THE FIRST THREE LETTERS OF THE SPECIFIC EPITHET.

           GENUS SYMBOL:  BROMU        SPECIFIC EPITHET:  TEC



        * NOTE - USE 'CNTL Y' TO STOP DISPLAY AFTER ANY PAGE *
```

Press RETURN and the following report (Figure 19) is produced:

Figure 19. Report No. F1 - Species Symbol Report

```
              NATIONAL PARK SERVICE COMMON DATA BASE      9/18/87
                       NPFLORA SPECIES SYMBOLS


     SPECIES:  BROMUS TECTORUM                  SYMBOL:      BRTE

           SPECIES AUTHOR:  L.
           INFRASPECIES:
                      VAR  GLABRATUS                        BRTEG

           INFRA AUTHOR:  SPENNER



     PRESS ANY KEY TO CONTINUE.
```

Note that a separate SYMBOL exists for each species and infraspecies (BRTE = *Bromus tectorum* vs BRTEG = *Bromus tectorum* var. *glabratus*). Be sure to use the correct SYMBOL for the plant of interest when running Report No. F3 (see page 27).

Report No. F2 - Park Checklist of Vascular Flora

This report provides the user with a complete checklist of vascular plants reported to occur within the boundaries of a specific park, a numeric summary of the diversity of families, genera, and species and infraspecies and the park botanical source citations used to document those occurrences within NPFLORA.

Report No. F2 provides the user with the following specific information about vascular plants in a particular park:

1. species name
2. infraspecies type and name
3. species symbol
4. family name
5. tabulation of diversity by family, genus and species and infraspecies
6. park botanical source citations
7. parksource number

NOTE: This report requires 10-15 minutes to run completely, so be patient. The report will also be comprised of numerous screens of data.
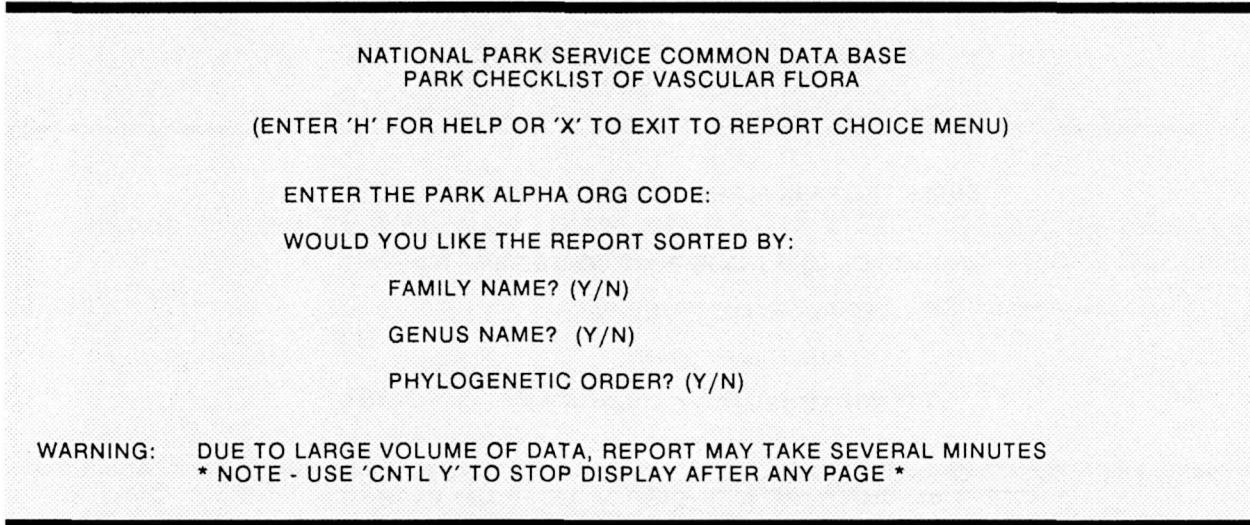
Beginning at the NPFLORA report choice menu, enter 1 and then F2 and press RETURN as shown in Figure 20.

Figure 20. NPFLORA Report Choice Menu

```
                        COMMON REPORT LIBRARY

        THE FOLLOWING STANDARD REPORTS CAN BE RUN FOR:  NPFLORA (PARK FLORA)


        REPORT NO.    REPORT TITLE
          F1          NPFLORA Species Symbols Report
          F2          Park Checklist of Vascular Flora
          F3          Individual Plant Species Distribution


    WOULD YOU LIKE TO:  1                         ENTER REPORT NO.  F2
            (1) RUN ONE OF THE REPORTS?           (2) SEE NEXT PAGE OF TITLES?
            (3) SEE PREVIOUS PAGE OF TITLES?      (4) EXIT TO REPORT LIBRARY MENU?
            (5) SEE REPORT DESCRIPTIONS?          (X) EXIT TO COMMON'S MAIN MENU?
```

The next screen (Figure 21) will appear.

Figure 21. Report No. F2 - Selection Screen

```
                NATIONAL PARK SERVICE COMMON DATA BASE
                   PARK CHECKLIST OF VASCULAR FLORA

           (ENTER 'H' FOR HELP OR 'X' TO EXIT TO REPORT CHOICE MENU)


              ENTER THE PARK ALPHA ORG CODE:

              WOULD YOU LIKE THE REPORT SORTED BY:

                   FAMILY NAME? (Y/N)

                   GENUS NAME?  (Y/N)

                   PHYLOGENETIC ORDER? (Y/N)


     WARNING:    DUE TO LARGE VOLUME OF DATA, REPORT MAY TAKE SEVERAL MINUTES
                 * NOTE - USE 'CNTL Y' TO STOP DISPLAY AFTER ANY PAGE *
```
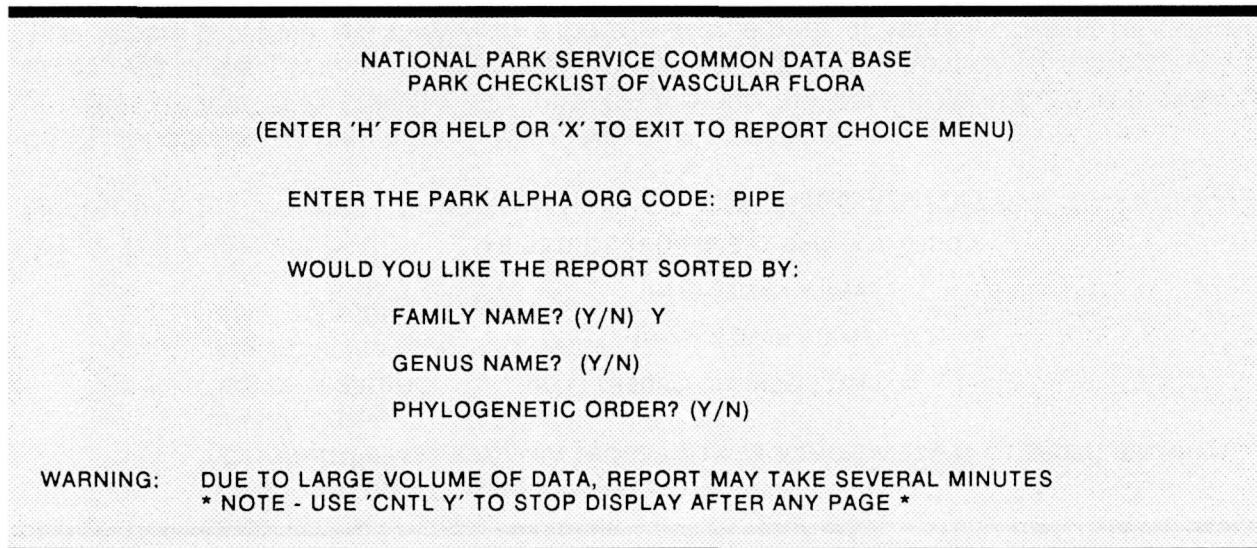
You must **first enter the PARK ALPHA ORG CODE** (ALPHACD) for the park of interest. On-line HELP for park alpha codes is available by entering an H in that data field. Following the alpha code entry, you have the option of determining how the report will be organized: (1) alphabetically by family name, (2) alphabetically by genus name or (3) phylogenetically by family with genera ordered alphabetically within each family. Use the TAB key to move to the appropriate line to enter a Y (yes), the others default to N (no). **Press RETURN** when ready to begin the query.

Remember, this report takes 10-15 minutes to run.

The three possible alternative reports (how the report will be organized) are illustrated in Figures 23, 24 and 25. The first example requests a checklist of vascular plants from Pipestone National Monument (PIPE) ordered alphabetically by family name (Figure 22).

NATIONAL PARK SERVICE COMMON DATA BASE
PARK CHECKLIST OF VASCULAR FLORA

(ENTER 'H' FOR HELP OR 'X' TO EXIT TO REPORT CHOICE MENU)

ENTER THE PARK ALPHA ORG CODE: PIPE

WOULD YOU LIKE THE REPORT SORTED BY:

FAMILY NAME? (Y/N) Y

GENUS NAME? (Y/N)

PHYLOGENETIC ORDER? (Y/N)

WARNING: DUE TO LARGE VOLUME OF DATA, REPORT MAY TAKE SEVERAL MINUTES
* NOTE - USE 'CNTL Y' TO STOP DISPLAY AFTER ANY PAGE *

The following (Figure 23) is the first screen of the multi-page report resulting from the above query. Note the checklist is ordered alphabetical by family which is given in the far right column. Also, the date of the query is provided in the upper right corner of the report.

Figure 23. Report No. F2 - Output

NATIONAL PARK SERVICE COMMON DATA BASE   6/28/89

CHECKLIST OF THE VASCULAR FLORA OF:
PIPESTONE NATIONAL MONUMENT

SPECIESNAME	SYMBOL	FAMILY NAME
ACER NEGUNDO	ACNE2	ACERACEAE
ALISMA SUBCORDATUM	ALSU	ALISMATACEAE
SAGITTARIA CUNEATA	SACU	
AMARANTHUS ALBUS	AMAL	AMARANTHACEAE
AMARANTHUS BLITOIDES	AMBL	
AMARANTHUS RETROFLEXUS	AMRE	
AMARANTHUS RUDIS	AMRU	
HYPOXIS HIRSUTA	HYHI2	AMARYLLIDACEAE
RHUS GLABRA	RHGL	ANACARDIACEAE
TOXICODENDRON RYDBERGII	TORY	
APOCYNUM CANNABINUM	APCA	APOCYNACEAE
APOCYNUM SIBIRICUM	APSI	

2

Press any key to continue.

At the end of the checklist, a tabulation of totals is calculated and presented, regardless of the order selected (Figure 23a).

TOTALS:	106 FAMILIES	288 GENERA	444 SPECIES AND INFRASPECIES

By pressing any key, the second part of the report will be presented listing the references used in producing the checklist for the particular park, e.g., Pipestone National Monument (Figure 23b).

Figure 23b. Report No. F2 - Listing of References

NATIONAL PARK SERVICE COMMON DATA BASE   6/28/89

CHECKLIST OF THE VASCULAR FLORA OF:
PIPESTONE NATIONAL MONUMENT

PARKSOURCES:

	PARKSOURCE NUMBER
Halvorsen, Vincent. 1986. Memorandum from Superintendent; Review of Vascular Flora from the NPFLORA Data Base. February 7, 1986.	1660
Anonymous. 1966. Checklist of Vascular Plants Collected and Identified in 1966. (unpublished)	1670

* THIS REPORT IS FROM NPFLORA, THE COMPUTERIZED DATA BASE OF THE
VASCULAR FLORA OF THE NATIONAL PARK SYSTEM. QUESTIONS, CORRECTIONS,
AND/OR ADDITIONS TO THESE DATA SHOULD BE DIRECTED TO GARY S. WAGGONER,
NPFLORA PROGRAM, GIS DIVISION, NATIONAL PARK SERVICE, P.O. BOX 25287,
DENVER, CO 80225.
PHONE: 327-2590 (FTS); (303) 969-2590 (COMMERCIAL)

Press any key to continue.

The second example (Figure 24) shows the first screen of the same report when ordered alphabetically by genus name. Note here how infraspecies are listed in these reports. *Agropyron trachycaulum* (AGTR), the "typical" species is listed as occurring first, then two varieties, *A. trachycaulum* var. *majus* (AGTRM) and *A. trachycaulum* var. *unilaterale* (AGTRU).

Figure 24. Report No. F2 - Ordered Alphabetically by Genus Name

NATIONAL PARK SERVICE COMMON DATA BASE   6/28/89

CHECKLIST OF THE VASCULAR FLORA OF:
PIPESTONE NATIONAL MONUMENT

SPECIES NAME	SYMBOL	FAMILY NAME
ACER NEGUNDO	ACNE2	ACERACEAE
ACHILLEA MILLEFOLIUM	ACMI2	COMPOSITAE
AGALINIS TENUIFOLIA	AGTE3	SCROPHULARIACEAE
AGASTACHE FOENICULUM	AGFO	LABIATAE
AGRIMONIA STRIATA	AGST	ROSACEAE
AGROPYRON CRISTATUM	AGCR	GRAMINEAE
AGROPYRON REPENS	AGRE2	
AGROPYRON SMITHII	AGSM	
AGROPYRON TRACHYCAULUM	AGTR	
AGROPYRON TRACHYCAULUM VAR MAJUS	AGTRM	
AGROPYRON TRACHYCAULUM VAR UNILATERALE	AGTRU	

2

Press any key to continue.

Finally, the same report (Figure 25) for Pipestone National Monument ordered phylogenetically appears this way.

Figure 25. Report No. F2 - Ordered Phylogenetically

NATIONAL PARK SERVICE COMMON DATA BASE   6/28/89

CHECKLIST OF THE VASCULAR FLORA OF:
PIPESTONE NATIONAL MONUMENT

SPECIES NAME	SYMBOL	FAMILY NAME
EQUISETUM LAEVIGATUM	EQLA	EQUISETACEAE
SELAGINELLA RUPESTRIS	SERU	SELAGINELLACEAE
CYSTOPTERIS FRAGILIS	CYFR2	POLYPODIACEAE
JUNIPERUS VIRGINIANA	JUVI	PINACEAE
PICEA GLAUCA	PIGL	
TYPHA LATIFOLIA	TYLA	TYPHACEAE
SPARGANIUM EURYCARPUM	SPEU	SPARGANIACEAE
POTAMOGETON FOLIOSUS	POFO3	POTAMOGETONACEAE
ALISMA SUBCORDATUM	ALSU	ALISMATACEAE
SAGITTARIA CUNEATA	SACU	
AGROPYRON CRISTATUM	AGCR	GRAMINEAE
AGROPYRON REPENS	AGRE2	

2

Press any key to continue.

Report No. F3 - Individual Plant Species Distribution
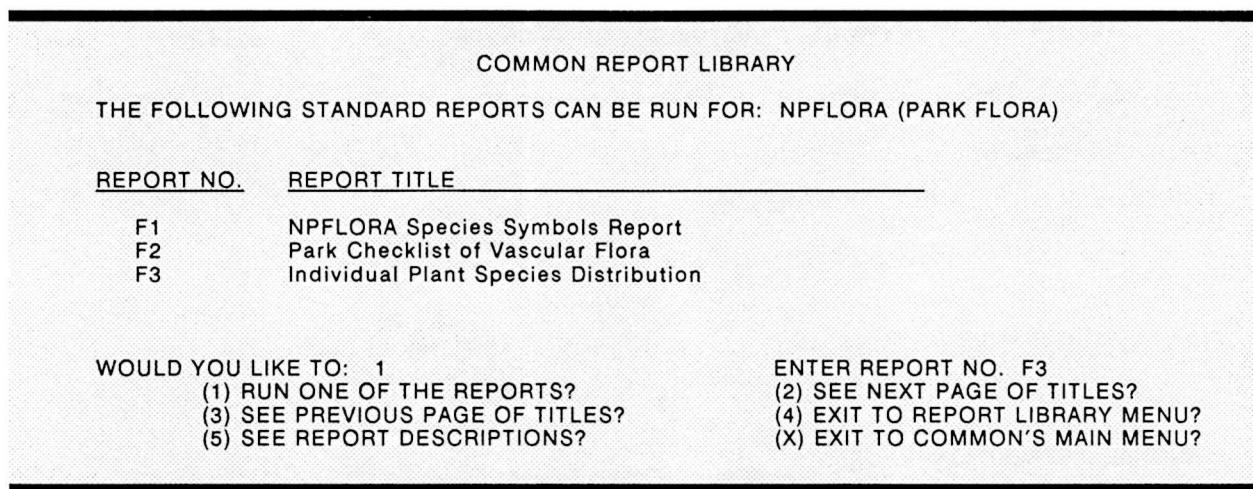
The Report No. F3 provides the user with information about the origin and distribution of any native or introduced vascular plant occurring in North America, Hawaii or the Caribbean, regardless of whether or not it occurs in a park.

This report provides the user with a variety of information about the species of interest. The report includes the following:

1. species symbol
2. family name
3. species name
4. species author
5. infraspecies type, name and author (if appropriate)
6. plant origin (native or introduced in North America, Hawaii and the Caribbean region)
7. regional distribution (see regional distribution map in Appendix 2)
8. park occurrences in alphabetical order
9. total number of parks reporting the plant
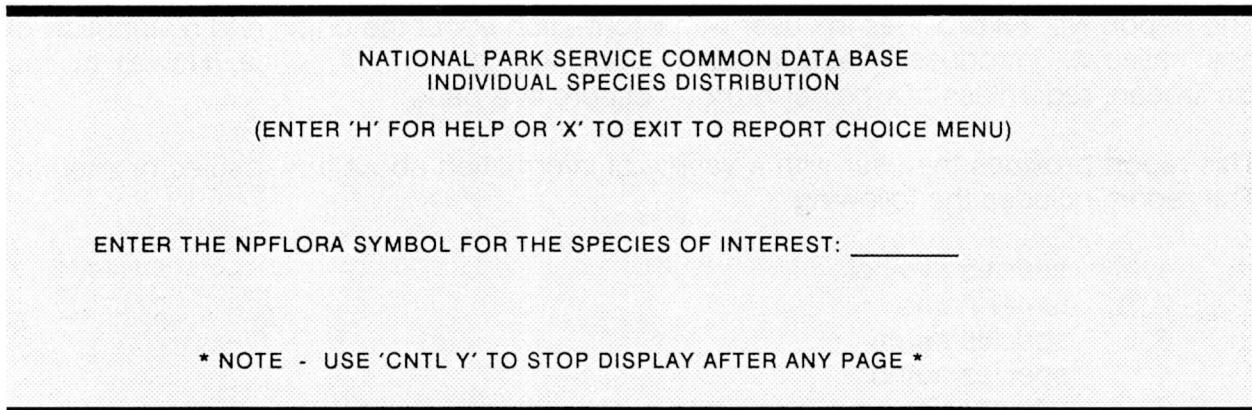
Beginning at the COMMON Report Library menu, enter 1 and then F3 and press RETURN as shown in Figure 26.

Figure 26. NPFLORA Report Choice Menu

```
                        COMMON REPORT LIBRARY

      THE FOLLOWING STANDARD REPORTS CAN BE RUN FOR: NPFLORA (PARK FLORA)


      REPORT NO.    REPORT TITLE

         F1         NPFLORA Species Symbols Report
         F2         Park Checklist of Vascular Flora
         F3         Individual Plant Species Distribution


   WOULD YOU LIKE TO:  1                     ENTER REPORT NO.  F3
         (1) RUN ONE OF THE REPORTS?         (2) SEE NEXT PAGE OF TITLES?
         (3) SEE PREVIOUS PAGE OF TITLES?    (4) EXIT TO REPORT LIBRARY MENU?
         (5) SEE REPORT DESCRIPTIONS?        (X) EXIT TO COMMON'S MAIN MENU?
```

The following screen (Figure 27) will then appear.

Figure 27. Report No. F3 - NPFLORA Symbol Selection Screen

```
            NATIONAL PARK SERVICE COMMON DATA BASE
                 INDIVIDUAL SPECIES DISTRIBUTION

       (ENTER 'H' FOR HELP OR 'X' TO EXIT TO REPORT CHOICE MENU)




   ENTER THE NPFLORA SYMBOL FOR THE SPECIES OF INTEREST: _____




        * NOTE - USE 'CNTL Y' TO STOP DISPLAY AFTER ANY PAGE *
```

Enter the SYMBOL for the species or infraspecies of interest and **press RETURN**. (If you do not know the SYMBOL for the species of interest, see the discussion on Report No. F1.) In this example (Figure 28), CECA4, the SYMBOL for *Cercis canadensis* (Redbud) was entered. The following five-screen report was created. (Report length varies with the particular plant in question.)

Figure 28. Report No. F3 - Output
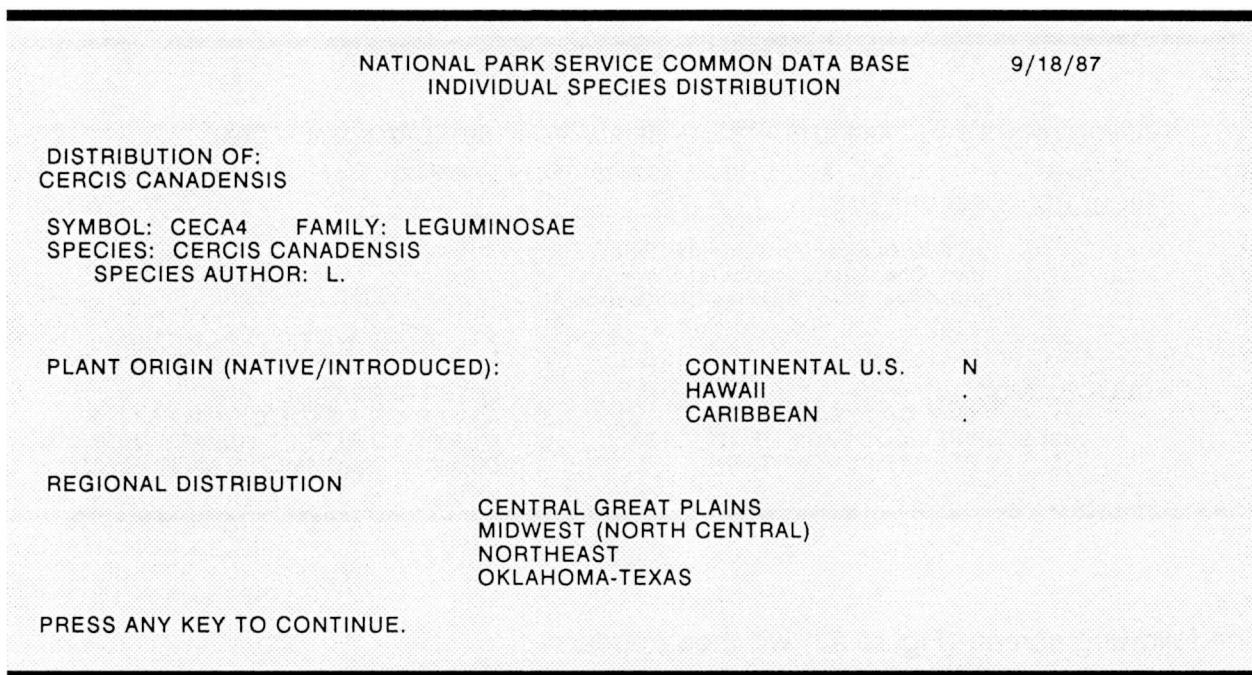
```
            NATIONAL PARK SERVICE COMMON DATA BASE        9/18/87
                 INDIVIDUAL SPECIES DISTRIBUTION


   DISTRIBUTION OF:
   CERCIS CANADENSIS

   SYMBOL: CECA4    FAMILY: LEGUMINOSAE
   SPECIES: CERCIS CANADENSIS
       SPECIES AUTHOR: L.



   PLANT ORIGIN (NATIVE/INTRODUCED):          CONTINENTAL U.S.   N
                                              HAWAII             .
                                              CARIBBEAN          .


   REGIONAL DISTRIBUTION
                          CENTRAL GREAT PLAINS
                          MIDWEST (NORTH CENTRAL)
                          NORTHEAST
                          OKLAHOMA-TEXAS

   PRESS ANY KEY TO CONTINUE.
```

```
                    NATIONAL PARK SERVICE COMMON DATA BASE          9/18/87
                          INDIVIDUAL SPECIES DISTRIBUTION


DISTRIBUTION OF:
CERCIS CANADENSIS

SYMBOL: CECA4    FAMILY: LEGUMINOSAE
SPECIES:  CERCIS CANADENSIS
     SPECIES AUTHOR:  L.


PLANT ORIGIN (NATIVE/INTRODUCED):              CONTINENTAL U.S.    N
                                               HAWAII              .
                                               CARIBBEAN           .


REGIONAL DISTRIBUTION
                              SOUTHEAST


PRESS ANY KEY TO CONTINUE.
```

```
                    NATIONAL PARK SERVICE COMMON DATA BASE          9/18/87
                          INDIVIDUAL SPECIES DISTRIBUTION


DISTRIBUTION OF:
CERCIS CANADENSIS

PARK OCCURRENCES:
                         ANTIETAM NATIONAL BATTLEFIELD
                         BIG BEND NATIONAL PARK
                         BIG SOUTH FORK NATIONAL RIVER & RECR AREA
                         BIG THICKET NATIONAL PRESERVE
                         BLUE RIDGE PARKWAY
                         BUFFALO NATIONAL RIVER
                         CATOCTIN MOUNTAIN PARK
                         CHICKAMAUGA & CHATTANOOGA NATL MILITARY PARK
                         COLONIAL NATIONAL HISTORICAL PARK
                         CONGAREE SWAMP NATIONAL MONUMENT
                         CUMBERLAND GAP NATIONAL HISTORICAL PARK
                         CUMBERLAND ISLAND NATIONAL SEASHORE
                         CUYAHOGA VALLEY NATIONAL RECREATION AREA
                         FORT CAROLINE NATIONAL MEMORIAL
                         FORT DONELSON NATIONAL MILITARY PARK

PRESS ANY KEY TO CONTINUE.
```

Figure 28c

```
                NATIONAL PARK SERVICE COMMON DATA BASE          9/18/87
                      INDIVIDUAL SPECIES DISTRIBUTION


   DISTRIBUTION OF:
   CERCIS CANADENSIS

   PARK OCCURRENCES:
                        GEORGE WASHINGTON CARVER NATIONAL MONUMENT
                        GEORGE WASHINGTON MEMORIAL PARKWAY
                        GREAT SMOKY MOUNTAINS NATIONAL PARK
                        HORSESHOE BEND NATIONAL MILITARY PARK
                        HOT SPRINGS NATIONAL PARK
                        MAMMOTH CAVE NATIONAL PARK
                        MANASSAS NATIONAL BATTLEFIELD PARK
                        NATCHEZ TRACE PARKWAY
                        NEW RIVER GORGE NATIONAL RIVER
                        OBED WILD & SCENIC RIVER
                        OZARK NATIONAL SCENIC RIVERWAYS
                        PRINCE WILLIAM FOREST PARK
                        RICHMOND NATIONAL BATTLEFIELD PARK
                        ROCK CREEK PARK
                        SHENANDOAH NATIONAL PARK

   PRESS ANY KEY TO CONTINUE.
```

Figure 28d

```
                NATIONAL PARK SERVICE COMMON DATA BASE          9/18/87
                      INDIVIDUAL SPECIES DISTRIBUTION


   DISTRIBUTION OF:
   CERCIS CANADENSIS

   PARK OCCURRENCES:
                        SHILOH NATIONAL MILITARY PARK
                        VALLEY FORGE NATIONAL HISTORICAL PARK
                        WILSON'S CREEK NATIONAL BATTLEFIELD

            TOTAL # OF NPS UNITS:  33






   PRESS ANY KEY TO CONTINUE.
```

INDIVIDUALIZED REPORTS

If information is needed from the NPFLORA module that is not available in the standard reports or not in the desired format, you may create an individualized, or custom, report to obtain the desired information and format. Custom reporting is also used to link data which resides in two or more modules in COMMON. You need to be familiar with RELATE 3000 commands, as well as COMMON's file structure and organization to produce such reports.

On-line assistance is available for RELATE commands, or if you have questions, call the NPFLORA Program Manager, the COMMON Data Base Manager or the COMMON Data Base Administrator.

Gary S. Waggoner   (FTS) 327-2590
NPFLORA Program Manager   (303) 969-2590
WASO Geographic Information Systems Division (Denver)

Anne Frondorf   (FTS) 343-8129
COMMON Data Base Manager   (303) 343-8129
WASO Wildlife and Vegetation Division

Bill Brimberry   (FTS) 343-4463
COMMON Data Base Administrator   (303) 343-4463
WASO Information and Data Systems Division

By using RELATE 3000 commands, you can bring together different kinds of data, in a variety of ways, to answer a wide range of questions relating to park resources and issues. Thus, these queries are a mechanism to take full advantage of all the various modules residing in COMMON.

As with standard reports, individualized reports can be run starting from the COMMON main menu. This menu (Figure 29) is both the first and last menu you come to while using COMMON.

Figure 29. COMMON Main Menu

```
HELLO AND WELCOME TO THE NATIONAL PARK SERVICE
COMMON DATA BASE.  COMMON INCLUDES A VARIETY OF
FREQUENTLY REQUESTED INFORMATION ABOUT PARK
UNITS SERVICEWIDE.

WOULD YOU LIKE TO: ___

ENTER NEW DATA OR UPDATE
OR DELETE EXISTING DATA?                            ENTER (1)

USE THE COMMON REPORT LIBRARY
TO RUN A STANDARD REPORT?                           ENTER (2)

RUN YOUR OWN INDIVIDUALIZED REPORT?                 ENTER (3)

PROCEED DIRECTLY TO DATA FILE SELECTION?            ENTER (4)

USE THE IPM DECISION TREE?                          ENTER (5)

EXIT FROM THE COMMON DATA BASE?                     ENTER (X)
```

To run an individualized report, **enter 3 and press RETURN.** The next screen (Figure 30) will appear.

Figure 30. Individualized Reporting Menu

```
                    COMMON DATA BASE
                 INDIVIDUALIZED REPORTING

IN ORDER TO CREATE AND RUN YOUR OWN INDIVIDUALIZED REPORTS
FROM THE COMMON DATA BASE, YOU SHOULD HAVE SOME FAMILIARITY
WITH THE COMMANDS IN THE RELATE/3000 LANGUAGE, AND WITH THE
BASIC ORGANIZATION OF THE COMMON DATA BASE.

CONSULT YOUR COMMON USER'S MANUAL, IF YOU HAVE QUESTIONS
ON RELATE COMMANDS OR ON THE ORGANIZATION OF THE COMMON
DATA BASE.

              WOULD YOU LIKE TO: ___

      GET INTRODUCTORY INFORMATION ON HOW THE
      COMMON DATA BASE IS ORGANIZED?               ENTER (1)

      CREATE YOUR OWN REPORT?                      ENTER (2)

      RETURN TO COMMON'S MAIN MENU?                ENTER (3)
```

Enter 2 to create your own report. At this point, the system puts you directly into the RELATE 3000 data base management system with a prompt of "1)" and you will begin using RELATE commands.

From this point in creating your individualized report, you begin RELATE 3000 commands which are documented in a series of RELATE 3000 User's Manuals available from the COMMON Data Base Administrator.

THE END

Botanically yours,

NPFLORA

APPENDIXES

GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL
ABELMOSCHUS	ABELM	AGROSTIS	AGROS2	AMPHICARPUM	AMPHI2
ABIES	ABIES	AILANTHUS	AILAN	AMPHILOPHIUM	AMPHI6
ABILDGAARDIA	ABILD	AIPHANES	AIPHA	AMPHIPAPPUS	AMPHI3
ABRONIA	ABRON	AIRA	AIRA+	AMPHITECNA	AMPHI7
ABRUS	ABRUS	AJUGA	AJUGA	AMSINCKIA	AMSIN
ABUTILON	ABUTI	AKEBIA	AKEBI	AMSONIA	AMSON
ACACIA	ACACI	ALBIZIA	ALBIZ	AMYRIS	AMYRI
ACAENA	ACAEN	ALCEA	ALCEA	ANACARDIUM	ANACA
ACALYPHA	ACALY	ALCHEMILLA	ALCHE	ANAGALLIS	ANAGA
ACAMPTOPAPPUS	ACAMP	ALCHORNEA	ALCHO	ANANAS	ANANA
ACANTHOMINTHA	ACANT2	ALCHORNEOPSIS	ALCHO2	ANANTHACORUS	ANANT
ACANTHOSPERMUM	ACANT3	ALECTRA	ALECT2	ANAPHALIS	ANAPH
ACER	ACER+	ALECTRYON	ALECT	ANCHUSA	ANCHU
ACHILLEA	ACHIL	ALETES	ALETE	ANCISTROCACTUS	ANCIS
ACHLYS	ACHLY	ALETRIS	ALETR	ANDIRA	ANDIR
ACHYRACHAENA	ACHYR	ALEURITES	ALEUR	ANDRACHNE	ANDRA
ACHYRANTHES	ACHYR2	ALHAGI	ALHAG	ANDROMEDA	ANDRO
ACHYRONYCHIA	ACHYR3	ALISMA	ALISM	ANDROPOGON	ANDRO2
ACICARPHA	ACICA	ALLAMANDA	ALLAM	ANDROSACE	ANDRO3
ACISANTHERA	ACISA	ALLENROLFEA	ALLEN	ANDROSTEPHIUM	ANDRO4
ACLEISANTHES	ACLEI	ALLIARIA	ALLIA	ANECHITES	ANECH
ACNISTUS	ACNIS	ALLIONIA	ALLIO	ANELSONIA	ANELS
ACOELORRAPHE	ACOEL	ALLIUM	ALLIU	ANEMIA	ANEMI
ACONITUM	ACONI	ALLOLEPIS	ALLOL	ANEMONE	ANEMO
ACORUS	ACORU	ALLOPHYLLUM	ALLOP2	ANEMOPSIS	ANEMO3
ACOURTIA	ACOUR	ALLOPHYLUS	ALLOP	ANETHUM	ANETH
ACROCERAS	ACROC2	ALLOTROPA	ALLOT	ANETIUM	ANETI
ACROCOMIA	ACROC	ALLOWISSADULA	ALLOW	ANGADENIA	ANGAD
ACROPTILON	ACROP	ALNUS	ALNUS	ANGELICA	ANGEL
ACROSTICHUM	ACROS	ALOCASIA	ALOCA	ANGELONIA	ANGEL2
ACTAEA	ACTAE	ALOE	ALOE+	ANGURIA	ANGUR
ACTINOSPERMUM	ACTIN2	ALOPECURUS	ALOPE	ANIBA	ANIBA
ACTINOSTACHYS	ACTIN	ALOPHIA	ALOPH	ANISACANTHUS	ANISA
ADANSONIA	ADANS	ALOYSIA	ALOYS	ANISEIA	ANISE
ADELIA	ADELI	ALPHITONIA	ALPHI	ANISOCOMA	ANISO3
ADENANTHERA	ADENA	ALPINIA	ALPIN	ANNONA	ANNON
ADENOCAULON	ADENO	ALSINIDENDRON	ALSIN	ANODA	ANODA
ADENOPHORUS	ADENO3	ALSOPHILA	ALSOP	ANOECTOCHILUS	ANOEC
ADENOSTEMMA	ADENO4	ALSTROEMERIA	ALSTR	ANOPTERIS	ANOPT
ADENOSTOMA	ADENO2	ALTERNANTHERA	ALTER2	ANREDERA	ANRED
ADIANTOPSIS	ADIAN2	ALTHAEA	ALTHA	ANTENNARIA	ANTEN
ADIANTUM	ADIAN	ALVARADOA	ALVAR	ANTHAENANTIA	ANTHA
ADLUMIA	ADLUM	ALYSICARPUS	ALYSI	ANTHEMIS	ANTHE
ADOLPHIA	ADOLP	ALYSSUM	ALYSS	ANTHEPHORA	ANTHE3
ADONIS	ADONI	ALYXIA	ALYXI	ANTHERICUM	ANTHE2
ADOXA	ADOXA	AMARANTHUS	AMARA	ANTHEROPEAS	ANTHE4
AECHMEA	AECHM	AMARYLLIS	AMARY	ANTHOCEPHALUS	ANTHO2
AEGIPHILA	AEGIP	AMBERBOA	AMBER	ANTHOXANTHUM	ANTHO
AEGOPODIUM	AEGOP	AMBLYOLEPIS	AMBLY	ANTHRISCUS	ANTHR
AEGOPOGON	AEGOP2	AMBLYOPAPPUS	AMBLY2	ANTHURIUM	ANTHU
AERVA	AERVA	AMBROSIA	AMBRO	ANTHYLLIS	ANTHY
AESCHYNOMENE	AESCH	AMELANCHIER	AMELA	ANTIDESMA	ANTID
AESCULUS	AESCU	AMELASORBUS	AMELA2	ANTIGONON	ANTIG
AETHUSA	AETHU	AMERORCHIS	AMERO	ANTIPHYTUM	ANTIP
AGALINIS	AGALI	AMIANTHIUM	AMIAN	ANTIRHEA	ANTIR
AGARISTA	AGARI	AMMANNIA	AMMAN	ANTIRRHINUM	ANTIR2
AGASTACHE	AGAST	AMMI	AMMI+	ANULOCAULIS	ANULO
AGAVE	AGAVE	AMMOBROMA	AMMOB	APACHERIA	APACH
AGDESTIS	AGDES2	AMMOCODON	AMMOC	APARGIDIUM	APARG
AGERATINA	AGERA2	AMMOPHILA	AMMOP	APERA	APERA
AGERATUM	AGERA	AMMOSELINUM	AMMOS	APHANAMIXIS	APHAN
AGOSERIS	AGOSE	AMOREUXIA	AMORE	APHANISMA	APHAN2
AGRIMONIA	AGRIM	AMORPHA	AMORP	APHANOSTEPHUS	APHAN3
AGROELYMUS	AGROE	AMPELAMUS	AMPEL	APHRAGMUS	APHRA
AGROHORDEUM	AGROH	AMPELODESMOS	AMPEL2	APIASTRUM	APIAS
AGROPOGON	AGROP3	AMPELOPSIS	AMPEL3	APIOS	APIOS
AGROPYRON	AGROP2	AMPHIACHYRIS	AMPHI8	APIUM	APIUM
AGROSITANION	AGROS3	AMPHIANTHUS	AMPHI5	APLECTRUM	APLEC
AGROSTEMMA	AGROS	AMPHICARPAEA	AMPHI4	APLOLEIA	APLOL

GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL
APOCYNUM	APOCY	ASTRANTHIUM	ASTRA2	BIXA	BIXA+
APODANTHERA	APODA	ASTREBLA	ASTRE	BLECHNUM	BLECH
APONOGETON	APONO	ASYNEUMA	ASYNE	BLECHUM	BLECH2
APTENIA	APTEN	ASYSTASIA	ASYST	BLENNOSPERMA	BLENN
APTERIA	APTER	ATAMISQUEA	ATAMI	BLEPHARIDACHNE	BLEPH
AQUILEGIA	AQUIL	ATHYRIUM	ATHYR	BLEPHARIPAPPUS	BLEPH2
ARABIDOPSIS	ARABI	ATHYSANUS	ATHYS	BLEPHARIZONIA	BLEPH3
ARABIS	ARABI2	ATRICHOSERIS	ATRIC	BLEPHARONEURON	BLEPH4
ARACHIS	ARACH	ATRIPLEX	ATRIP	BLEPHILIA	BLEPH5
ARACHNIODES	ARACH2	ATROPA	ATROP	BLETIA	BLETI
ARALIA	ARALI	AUREOLARIA	AUREO	BLOOMERIA	BLOOM
ARAUJIA	ARAUJ	AURINIA	AURIN	BLUMEA	BLUME
ARBUTUS	ARBUT	AVENA	AVENA	BLYSMUS	BLYSM
ARCEUTHOBIUM	ARCEU	AVENOCHLOA	AVENO	BOBEA	BOBEA
ARCTAGROSTIS	ARCTA	AVICENNIA	AVICE	BOCCONIA	BOCCO
ARCTIUM	ARCTI	AXONOPUS	AXONO	BOEHMERIA	BOEHM
ARCTOMECON	ARCTO	AXYRIS	AXYRI	BOERHAVIA	BOERH2
ARCTOPHILA	ARCTO2	AYAPANA	AYAPA	BOISDUVALIA	BOISD
ARCTOSTAPHYLOS	ARCTO3	AYENIA	AYENI	BOLANDRA	BOLAN
ARCTOTIS	ARCTO4	AZADIRACHTA	AZADI	BOLBITIS	BOLBI
ARDISIA	ARDIS	AZOLLA	AZOLL	BOLTONIA	BOLTO
ARENARIA	ARENA	BACCHARIS	BACCH	BOMMERIA	BOMME
ARETHUSA	ARETH	BACOPA	BACOP	BONAMIA	BONAM
ARGEMONE	ARGEM	BAHIA	BAHIA	BONAVERIA	BONAV
ARGYRANTHEMUM	ARGYR3	BAILEYA	BAILE	BONTIA	BONTI
ARGYRAUTIA	ARGYR4	BALDUINA	BALDU	BORAGO	BORAG
ARGYREIA	ARGYR2	BALLOTA	BALLO	BORASSUS	BORAS
ARGYROXIPHIUM	ARGYR	BALSAMORHIZA	BALSA	BORRERIA	BORRE
ARGYTHAMNIA	ARGYT	BAMBUSA	BAMBU	BORRICHIA	BORRI
ARIOCARPUS	ARIOC	BANARA	BANAR	BOSCHNIAKIA	BOSCH
ARISAEMA	ARISA	BAPTISIA	BAPTI	BOTHRIOCHLOA	BOTHR
ARISTIDA	ARIST	BARBAREA	BARBA	BOTHRIOSPERMUM	BOTHR2
ARISTOLOCHIA	ARIST2	BARBIERIA	BARBI	BOTRYCHIUM	BOTRY
ARMERIA	ARMER	BARLERIA	BARLE	BOUCHEA	BOUCH
ARMORACIA	ARMOR	BARTLETTIA	BARTL	BOUCHETIA	BOUCH2
ARNICA	ARNIC	BARTONIA	BARTO	BOUGAINVILLEA	BOUGA
ARNOGLOSSUM	ARNOG	BASIPHYLLAEA	BASIP	BOURRERIA	BOURR
ARNOSERIS	ARNOS	BASSIA	BASSI	BOUSSINGAULTIA	BOUSS
ARONIA	ARONI	BASTARDIA	BASTA	BOUTELOUA	BOUTE
ARRABIDAEA	ARRAB	BATESIMALVA	BATES	BOUVARDIA	BOUVA
ARRHENATHERUM	ARRHE	BATIS	BATIS	BOWLESIA	BOWLE
ARTEMISIA	ARTEM	BATSCHIA	BATSC	BOYKINIA	BOYKI
ARTHRAXON	ARTHR	BAUHINIA	BAUHI	BRACHIARIA	BRACH
ARTHROSTEMA	ARTHR3	BEBBIA	BEBBI	BRACHIONIDIUM	BRACH4
ARTHROSTYLIDIUM	ARTHR2	BECKMANNIA	BECKM	BRACHYELYTRUM	BRACH2
ARTOCARPUS	ARTOC	BEFARIA	BEFAR	BRACHYPODIUM	BRACH3
ARUM	ARUM+	BEGONIA	BEGON	BRACHYSTIGMA	BRACH5
ARUNCUS	ARUNC	BEILSCHMIEDIA	BEILS	BRADBURIA	BRADB
ARUNDINA	ARUND	BELAMCANDA	BELAM	BRANDEGEA	BRAND
ARUNDINARIA	ARUND2	BELLARDIA	BELLA	BRASENIA	BRASE
ARUNDINELLA	ARUND3	BELLIS	BELLI	BRASSAVOLA	BRASS3
ARUNDO	ARUND4	BENITOA	BENIT	BRASSIA	BRASS4
ASANTHUS	ASANT	BENSONIELLA	BENSO	BRASSICA	BRASS2
ASARUM	ASARU	BERBERIS	BERBE	BRAYA	BRAYA
ASCLEPIAS	ASCLE	BERCHEMIA	BERCH	BRAZORIA	BRAZO
ASCYRUM	ASCYR	BERGIA	BERGI	BREYNIA	BREYN
ASIMINA	ASIMI	BERLANDIERA	BERLA	BRICKELLIA	BRICK
ASPALTHIUM	ASPAL	BERNARDIA	BERNA	BRICKELLIASTRUM	BRICK2
ASPARAGUS	ASPAR	BERTEROA	BERTE	BRIGHAMIA	BRIGH
ASPERUGO	ASPER	BERULA	BERUL	BRIZA	BRIZA
ASPERULA	ASPER2	BESSEYA	BESSE	BRODIAEA	BRODI
ASPHODELUS	ASPHO	BETA	BETA+	BROMELIA	BROME
ASPICARPA	ASPIC	BETULA	BETUL	BROMUS	BROMU
ASPIDOTIS	ASPID2	BIDENS	BIDEN	BRONGNIARTIA	BRONG
ASPLENIUM	ASPLE	BIFORA	BIFOR	BROSIMUM	BROSI
ASTELIA	ASTEL	BIGELOWIA	BIGEL	BROUSSAISIA	BROUS2
ASTER	ASTER	BIGNONIA	BIGNO	BROUSSONETIA	BROUS
ASTILBE	ASTIL	BIOPHYTUM	BIOPH	BROWALLIA	BROWA
ASTRAGALUS	ASTRA	BISCHOFIA	BISCH	BRUGUIERA	BRUGU

GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL
BRUNELLIA	BRUNE	CANAVALIA	CANAV	CENTRANTHUS	CENTR
BRUNFELSIA	BRUNF	CANBYA	CANBY	CENTROSEMA	CENTR2
BRUNNICHIA	BRUNN	CANELLA	CANEL	CENTROSTACHYS	CENTR5
BRYONIA	BRYON	CANNA	CANNA2	CENTROSTEGIA	CENTR4
BUCHENAVIA	BUCHE	CANNABIS	CANNA	CENTUNCULUS	CENTU
BUCHLOE	BUCHL	CANOTIA	CANOT	CEPHALANTHERA	CEPHA3
BUCHNERA	BUCHN	CANTHIUM	CANTH	CEPHALANTHUS	CEPHA
BUCIDA	BUCID	CAPERONIA	CAPER	CEPHALOCEREUS	CEPHA2
BUCKLEYA	BUCKL	CAPPARIS	CAPPA	CERASTIUM	CERAS
BUDDLEJA	BUDDL2	CAPRARIA	CAPRA2	CERATIOLA	CERAT5
BULBOPHYLLUM	BULBO2	CAPSELLA	CAPSE	CERATOCEPHALA	CERAT3
BULBOSTYLIS	BULBO	CAPSICUM	CAPSI	CERATONIA	CERAT4
BUMELIA	BUMEL	CARAGANA	CARAG	CERATOPHYLLUM	CERAT
BUNCHOSIA	BUNCH	CARDAMINE	CARDA	CERATOPTERIS	CERAT2
BUNIAS	BUNIA	CARDARIA	CARDA2	CERATOTHECA	CERAT6
BUNIUM	BUNIU	CARDIONEMA	CARDI	CERCIS	CERCI2
BUPLEURUM	BUPLE	CARDIOSPERMUM	CARDI2	CERCOCARPUS	CERCO
BURMANNIA	BURMA	CARDUUS	CARDU	CEREUS	CEREU
BURSERA	BURSE	CAREX	CAREX	CESTRUM	CESTR
BUTOMUS	BUTOM	CARICA	CARIC	CETERACH	CETER
BUXUS	BUXUS	CARISSA	CARIS	CEVALLIA	CEVAL
BYRSONIMA	BYRSO	CARLINA	CARLI	CHAENACTIS	CHAEN
CABOMBA	CABOM	CARLOWRIGHTIA	CARLO	CHAENARRHINUM	CHAEN3
CACALIOPSIS	CACAL4	CARMINATIA	CARMI	CHAENOMELES	CHAEN2
CAESALPINIA	CAESA	CARPENTERIA	CARPE	CHAEROPHYLLUM	CHAER
CAJANUS	CAJAN	CARPHEPHORUS	CARPH	CHAETADELPHA	CHAET
CAKILE	CAKIL	CARPHOCHAETE	CARPH2	CHAETOPAPPA	CHAET2
CALADIUM	CALAD	CARPINUS	CARPI	CHAMAEBATIA	CHAMA
CALAMAGROSTIS	CALAM	CARPOBROTUS	CARPO	CHAMAEBATIARIA	CHAMA2
CALAMOVILFA	CALAM2	CARTHAMUS	CARTH	CHAMAECHAENACTIS	CHAMA3
CALANDRINIA	CALAN	CARUM	CARUM	CHAMAECYPARIS	CHAMA4
CALATHEA	CALAT	CARYA	CARYA	CHAMAEDAPHNE	CHAMA5
CALENDULA	CALEN	CASEARIA	CASEA	CHAMAELIRIUM	CHAMA6
CALEPINA	CALEP	CASSIA	CASSI	CHAMAEMELUM	CHAMA11
CALLA	CALLA	CASSINE	CASSI2	CHAMAERHODOS	CHAMA7
CALLIANDRA	CALLI	CASSIOPE	CASSI3	CHAMAESARACHA	CHAMA8
CALLICARPA	CALLI2	CASSIPOUREA	CASSI4	CHAMAESENNA	CHAMA9
CALLIRHOE	CALLI3	CASSYTHA	CASSY	CHAMAESYCE	CHAMA10
CALLISIA	CALLI4	CASTANEA	CASTA	CHAMISSOA	CHAMI
CALLISTEMON	CALLI5	CASTANOPSIS	CASTA2	CHAPMANNIA	CHAPM
CALLITRICHE	CALLI6	CASTELA	CASTE2	CHAPTALIA	CHAPT
CALLITRIS	CALLI7	CASTILLEJA	CASTI2	CHARPENTIERA	CHARP
CALLUNA	CALLU	CASUARINA	CASUA	CHASMANTHE	CHASM2
CALOCHORTUS	CALOC	CATABROSA	CATAB	CHASMANTHIUM	CHASM
CALOPHYLLUM	CALOP	CATALPA	CATAL	CHEILANTHES	CHEIL
CALOPOGON	CALOP2	CATAPODIUM	CATAP	CHEIRODENDRON	CHEIR
CALOPOGONIUM	CALOP3	CATESBAEA	CATES	CHEIROGLOSSA	CHEIR2
CALOTROPIS	CALOT	CATHARANTHUS	CATHA	CHELIDONIUM	CHELI
CALTHA	CALTH	CATHESTECUM	CATHE	CHELONE	CHELO
CALYCADENIA	CALYC	CATOPSIS	CATOP	CHENOPODIUM	CHENO
CALYCANTHUS	CALYC5	CATTLEYA	CATTL	CHILIANTHUS	CHILI
CALYCOCARPUM	CALYC2	CAUCALIS	CAUCA	CHILOPSIS	CHILO
CALYCOGONIUM	CALYC3	CAULANTHUS	CAULA	CHIMAPHILA	CHIMA
CALYCOSERIS	CALYC4	CAULOPHYLLUM	CAULO	CHIOCOCCA	CHIOC
CALYLOPHUS	CALYL	CAULOSTRAMINA	CAULO2	CHIONANTHUS	CHION
CALYPSO	CALYP	CAYAPONIA	CAYAP	CHIONE	CHION3
CALYPTOCARPUS	CALYP2	CEANOTHUS	CEANO	CHIONOPHILA	CHION2
CALYPTRANTHES	CALYP3	CECROPIA	CECRO	CHLORIS	CHLOR
CALYPTRIDIUM	CALYP4	CEDRELA	CEDRE	CHLOROCRAMBE	CHLOR2
CALYPTRONOMA	CALYP5	CEDRONELLA	CEDRO	CHLOROGALUM	CHLOR3
CALYSTEGIA	CALYS	CEIBA	CEIBA	CHLOROPHORA	CHLOR4
CAMASSIA	CAMAS	CELASTRUS	CELAS	CHOISYA	CHOIS
CAMELINA	CAMEL	CELOSIA	CELOS	CHONDRILLA	CHOND
CAMISSONIA	CAMIS	CELTIS	CELTI	CHORISIA	CHORI3
CAMPANULA	CAMPA	CENCHRUS	CENCH	CHORISPORA	CHORI
CAMPELIA	CAMPE	CENTAUREA	CENTA	CHORIZANTHE	CHORI2
CAMPSIS	CAMPS	CENTAURIUM	CENTA2	CHRISTOLEA	CHRIS
CAMPYLOCENTRUM	CAMPY2	CENTELLA	CENTE	CHROMOLAENA	CHROM
CAMPYLONEURUM	CAMPY	CENTIPEDA	CENTI	CHRYSACTINIA	CHRYS

GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL
CHRYSANTHELLUM	CHRYS10	COLCHICUM	COLCH	COTONEASTER	COTON
CHRYSANTHEMUM	CHRYS2	COLDENIA	COLDE	COTTEA	COTTE
CHRYSOBALANUS	CHRYS3	COLEANTHUS	COLEA	COTULA	COTUL
CHRYSOGONUM	CHRYS4	COLEOGYNE	COLEO	COTYLEDON	COTYL
CHRYSOMA	CHRYS11	COLEUS	COLEU	COURSETIA	COURS
CHRYSOPHYLLUM	CHRYS5	COLLINSIA	COLLI	COWANIA	COWAN
CHRYSOPOGON	CHRYS6	COLLINSONIA	COLLI2	CRACCA	CRACC
CHRYSOSPLENIUM	CHRYS8	COLLOMIA	COLLO	CRAMBE	CRAMB
CHRYSOTHAMNUS	CHRYS9	COLOCASIA	COLOC	CRANICHIS	CRANI
CHUSQUEA	CHUSQ	COLOGANIA	COLOG	CRANIOLARIA	CRANI2
CIBOTIUM	CIBOT	COLPODIUM	COLPO	CRASSULA	CRASS
CICENDIA	CICEN	COLUBRINA	COLUB	CRATAEGUS	CRATA
CICER	CICER	COLUMNEA	COLUM	CRATEVA	CRATE
CICHORIUM	CICHO	COLUTEA	COLUT	CREPIS	CREPI
CICLOSPERMUM	CICLO	COMANDRA	COMAN	CRESCENTIA	CRESC
CICUTA	CICUT	COMAROSTAPHYLIS	COMAR	CRESSA	CRESS
CIENFUEGOSIA	CIENF	COMMELINA	COMME	CRINUM	CRINU
CIMICIFUGA	CIMIC	COMMICARPUS	COMMI	CRITONIA	CRITO
CINNA	CINNA	COMOCLADIA	COMOC	CROCANTHEMUM	CROCA
CINNAMOMUM	CINNA2	COMPARETTIA	COMPA	CROCIDIUM	CROCI
CIRCAEA	CIRCA	CONDALIA	CONDA	CROCOSMIA	CROCO
CIRSIUM	CIRSI	CONDYLIDIUM	CONDY	CROCUS	CROCU
CISSAMPELOS	CISSA	CONGEA	CONGE	CROOMIA	CROOM
CISSUS	CISSU	CONIMITELLA	CONIM	CROSSOPETALUM	CROSS
CISTUS	CISTU	CONIOGRAMME	CONIO2	CROSSOSOMA	CROSS2
CITHAREXYLUM	CITHA	CONIOSELINUM	CONIO	CROTALARIA	CROTA
CITRULLUS	CITRU	CONIUM	CONIU	CROTON	CROTO
CITRUS	CITRU2	CONOCARPUS	CONOC	CROTONOPSIS	CROTO2
CLADIUM	CLADI	CONOCLINIUM	CONOC2	CRUCIANELLA	CRUCI
CLADRASTIS	CLADR	CONOPHOLIS	CONOP	CRUPINA	CRUPI
CLAOXYLON	CLAOX	CONOSTEGIA	CONOS	CRUSEA	CRUSE
CLAPPIA	CLAPP	CONRADINA	CONRA	CRYPSIS	CRYPS
CLARKIA	CLARK	CONRINGIA	CONRI	CRYPTANTHA	CRYPT
CLAYTONIA	CLAYT	CONSOLIDA	CONSO	CRYPTOCARYA	CRYPT2
CLEISTES	CLEIS	CONVALLARIA	CONVA	CRYPTOGRAMMA	CRYPT3
CLEMATIS	CLEMA	CONVOLVULUS	CONVO	CRYPTOSTEGIA	CRYPT6
CLEOME	CLEOM	CONYZA	CONYZ	CRYPTOTAENIA	CRYPT5
CLEOMELLA	CLEOM2	COOPERIA	COOPE	CTENITIS	CTENI2
CLERMONTIA	CLERM	COPROSMA	COPRO	CTENIUM	CTENI
CLERODENDRUM	CLERO2	COPTIS	COPTI	CUCUMIS	CUCUM
CLETHRA	CLETH	CORALLOCARPUS	CORAL3	CUCURBITA	CUCUR
CLEYERA	CLEYE	CORALLORRHIZA	CORAL2	CULLEN	CULLE
CLIBADIUM	CLIBA	CORCHORUS	CORCH	CUMINUM	CUMIN
CLIDEMIA	CLIDE	CORDIA	CORDI	CUNILA	CUNIL
CLIFTONIA	CLIFT	CORDYLANTHUS	CORDY	CUPANIA	CUPAN
CLINTONIA	CLINT	CORDYLINE	CORDY2	CUPHEA	CUPHE
CLITORIA	CLITO	COREMA	COREM	CUPRESSUS	CUPRE
CLUSIA	CLUSI	COREOCARPUS	COREO	CURCULIGO	CURCU2
CNEMIDARIA	CNEMI	COREOPSIS	COREO2	CURCUMA	CURCU
CNEORIDIUM	CNEOR	CORETHROGYNE	CORET	CUSCUTA	CUSCU
CNICUS	CNICU	CORIANDRUM	CORIA	CUTANDIA	CUTAN
CNIDIUM	CNIDI	CORIDOCHLOA	CORID	CUTHBERTIA	CUTHB
CNIDOSCOLUS	CNIDO	CORISPERMUM	CORIS	CYANEA	CYANE
COCCINIA	COCCI	CORNUS	CORNU	CYATHEA	CYATH
COCCOCYPSELUM	COCCO3	CORNUTIA	CORNU2	CYCLADENIA	CYCLA
COCCOLOBA	COCCO	CORONILLA	CORON	CYCLANTHERA	CYCLA2
COCCOTHRINAX	COCCO2	CORONOPUS	CORON3	CYCLOLOMA	CYCLO
COCCULUS	COCCU	CORRIGIOLA	CORRI	CYCLOPELTIS	CYCLO2
COCHLEANTHES	COCHL2	CORTADERIA	CORTA	CYDISTA	CYDIS
COCHLEARIA	COCHL4	CORYDALIS	CORYD	CYDONIA	CYDON
COCHLIDIUM	COCHL	CORYLUS	CORYL	CYMBALARIA	CYMBA
COCOS	COCOS	CORYMBORKIS	CORYM	CYMBOPOGON	CYMBO
CODIAEUM	CODIA	CORYNELLA	CORYN3	CYMODOCEA	CYMOD
COELIA	COELI	CORYNEPHORUS	CORYN	CYMOPHYLLUS	CYMOP
COELOGLOSSUM	COELO2	CORYNOCARPUS	CORYN2	CYMOPTERUS	CYMOP2
COELORACHIS	COELO	CORYPHANTHA	CORYP	CYNANCHUM	CYNAN
COELOSTYLIS	COELO3	COSMOS	COSMO	CYNARA	CYNAR
COFFEA	COFFE	COSTUS	COSTU	CYNOCTONUM	CYNOC
COIX	COIX+	COTINUS	COTIN	CYNODENDRON	CYNOD2

GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL
CYNODON	CYNOD	DICHONDRA	DICHO	DUGALDIA	DUGAL
CYNOGLOSSUM	CYNOG	DICHROMENA	DICHR	DULICHIUM	DULIC
CYNOMETRA	CYNOM	DICHROSTACHYS	DICHR2	DUPONTIA	DUPON
CYNOSCIADIUM	CYNOS	DICLIPTERA	DICLI	DURANTA	DURAN
CYNOSURUS	CYNOS2	DICORIA	DICOR	DYSCHORISTE	DYSCH
CYPERUS	CYPER	DICRANOCARPUS	DICRA	DYSSODIA	DYSSO
CYPHOLOPHUS	CYPHO2	DICRANOPTERIS	DICRA2	EASTWOODIA	EASTW
CYPHOMERIS	CYPHO	DICRAURUS	DICRA3	EATONELLA	EATON
CYPRIPEDIUM	CYPRI	DIDIPLIS	DIDIP	ECHEVERIA	ECHEV
CYPSELEA	CYPSE	DIDYMOPANAX	DIDYM	ECHINACEA	ECHIN
CYRILLA	CYRIL	DIECTOMIS	DIECT	ECHINOCACTUS	ECHIN2
CYRTANDRA	CYRTA	DIEFFENBACHIA	DIEFF	ECHINOCEREUS	ECHIN3
CYRTOMIUM	CYRTO	DIELLIA	DIELL	ECHINOCHLOA	ECHIN4
CYRTOPODIUM	CYRTO2	DIERVILLA	DIERV	ECHINOCYSTIS	ECHIN5
CYSTOPTERIS	CYSTO	DIGITALIS	DIGIT	ECHINODORUS	ECHIN6
CYTISUS	CYTIS	DIGITARIA	DIGIT2	ECHINOPEPON	ECHIN7
DACRYODES	DACRY	DILOMILIS	DILOM	ECHINOPS	ECHIN8
DACTYLIS	DACTY	DIMERESIA	DIMER	ECHITES	ECHIT
DACTYLOCTENIUM	DACTY2	DIMORPHOCARPA	DIMOR	ECHIUM	ECHIU
DACTYLORHIZA	DACTY3	DIMORPHOTHECA	DIMOR2	ECLIPTA	ECLIP
DAHLIA	DAHLI	DIOCLEA	DIOCL	ECTOSPERMA	ECTOS
DALBERGIA	DALBE	DIODIA	DIODI	EGERIA	EGERI
DALEA	DALEA	DIONAEA	DIONA	EGLETES	EGLET
DALECHAMPIA	DALEC	DIOSCOREA	DIOSC	EHRETIA	EHRET
DALIBARDA	DALIB	DIOSPYROS	DIOSP	EHRHARTA	EHRHA
DANAEA	DANAE	DIPHOLIS	DIPHO	EICHHORNIA	EICHH
DANTHONIA	DANTH	DIPHYLLEIA	DIPHY2	ELAEAGNUS	ELAEA
DAPHNE	DAPHN2	DIPHYSA	DIPHY	ELAEOCARPUS	ELAEO
DAPHNOPSIS	DAPHN	DIPLAZIUM	DIPLA2	ELAPHOGLOSSUM	ELAPH
DARLINGTONIA	DARLI	DIPLOTAXIS	DIPLO	ELATINE	ELATI
DASISTOMA	DASIS	DIPSACUS	DIPSA	ELEOCHARIS	ELEOC
DASYLIRION	DASYL	DIRCA	DIRCA	ELEPHANTOPUS	ELEPH
DASYNOTUS	DASYN	DISPHYMA	DISPH	ELEUSINE	ELEUS
DATISCA	DATIS	DISPORUM	DISPO	ELEUTHERANTHERA	ELEUT2
DATURA	DATUR	DISSANTHELIUM	DISSA	ELEUTHERINE	ELEUT
DAUCOSMA	DAUCO	DISSOCHONDRUS	DISSO	ELLEANTHUS	ELLEA
DAUCUS	DAUCU	DISTICHLIS	DISTI	ELLIOTTIA	ELLIO
DECODON	DECOD	DISTICTIS	DISTI2	ELLISIA	ELLIS
DECUMARIA	DECUM	DITHYREA	DITHY	ELMERA	ELMER
DEDECKERA	DEDEC	DITTA	DITTA	ELODEA	ELODE
DEERINGOTHAMNUS	DEERI	DITTRICHIA	DITTR	ELSHOLTZIA	ELSHO
DELISSEA	DELIS	DODECATHEON	DODEC	ELTROPLECTRIS	ELTRO
DELONIX	DELON	DODONAEA	DODON	ELYHORDEUM	ELYHO
DELPHINIUM	DELPH	DOLIOCARPUS	DOLIO	ELYMUS	ELYMU
DENDRANTHEMA	DENDR5	DOMBEYA	DOMBE	ELYNA	ELYNA
DENDROMECON	DENDR	DOMINGOA	DOMIN	ELYONURUS	ELYON
DENDROPANAX	DENDR2	DOODIA	DOODI	ELYSITANION	ELYSI
DENDROPEMON	DENDR3	DOPATRIUM	DOPAT	ELYTRARIA	ELYTR
DENDROPHTHORA	DENDR4	DORONICUM	DORON	EMBELIA	EMBEL
DENNSTAEDTIA	DENNS	DORSTENIA	DORST	EMEX	EMEX+
DENTARIA	DENTA	DORYOPTERIS	DORYO	EMILIA	EMILI
DESCHAMPSIA	DESCH	DOUGLASIA	DOUGL	EMMENANTHE	EMMEN
DESCURAINIA	DESCU	DOWNINGIA	DOWNI	EMORYA	EMORY
DESMANTHUS	DESMA	DRABA	DRABA	EMPETRUM	EMPET
DESMODIUM	DESMO	DRACOCEPHALUM	DRACO	ENCELIA	ENCEL
DEUTZIA	DEUTZ	DRACONTIUM	DRACO2	ENCELIOPSIS	ENCEL2
DIAMORPHA	DIAMO	DRACOPIS	DRACO3	ENCYCLIA	ENCYC
DIANELLA	DIANE	DRAPERIA	DRAPE	ENEMION	ENEMI
DIANTHUS	DIANT	DREJERELLA	DREJE	ENGELMANNIA	ENGEL
DIAPENSIA	DIAPE	DROSANTHEMUM	DROSA	ENICOSTEMA	ENICO
DIARRHENA	DIARR	DROSERA	DROSE	ENNEAPOGON	ENNEA
DICENTRA	DICEN	DRYAS	DRYAS	ENTADOPSIS	ENTAD
DICERANDRA	DICER	DRYMARIA	DRYMA	ENTANDROPHRAGMA	ENTAN
DICHAEA	DICHA4	DRYOPETALON	DRYOP2	ENTEROPOGON	ENTER2
DICHAETOPHORA	DICHA	DRYOPTERIS	DRYOP	ENYDRA	ENYDR
DICHANTHELIUM	DICHA2	DRYPETES	DRYPE	EPHEDRA	EPHED
DICHANTHIUM	DICHA3	DUBAUTIA	DUBAU	EPIDENDRUM	EPIDE
DICHELACHNE	DICHE	DUCHESNEA	DUCHE	EPIFAGUS	EPIFA
DICHELOSTEMMA	DICHE2	DUDLEYA	DUDLE	EPIGAEA	EPIGA

GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL
EPILOBIUM	EPILO	EXOCARPOS	EXOCA	GALIUM	GALIU
EPIPACTIS	EPIPA	EXOCHORDA	EXOCH	GALPHIMIA	GALPH
EPITHELANTHA	EPITH	EXOSTEMA	EXOST	GALVEZIA	GALVE
EQUISETUM	EQUIS	EXOTHEA	EXOTH	GAMOCHAETA	GAMOC
ERAGROSTIS	ERAGR	EYSENHARDTIA	EYSEN	GARBERIA	GARBE
ERANTHIS	ERANT2	FACELIS	FACEL	GARDENIA	GARDE
ERECHTITES	ERECH	FADYENIA	FADYE	GARNOTIA	GARNO
EREMALCHE	EREMA	FAGONIA	FAGON	GARRYA	GARRY
EREMOCARPUS	EREMO	FAGOPYRUM	FAGOP2	GASOUL	GASOU
EREMOCHLOA	EREMO2	FAGUS	FAGUS	GASTRIDIUM	GASTR
EREMOCRINUM	EREMO3	FALCARIA	FALCA	GAULTHERIA	GAULT
EREMOLEPIS	EREMO6	FALLUGIA	FALLU	GAURA	GAURA
EREMOPOA	EREMO4	FARAMEA	FARAM	GAUSSIA	GAUSS
EREMOPYRUM	EREMO5	FAURIA	FAURI	GAYLUSSACIA	GAYLU
ERIANTHUS	ERIAN	FENDLERA	FENDL	GAYOPHYTUM	GAYOP
ERIASTRUM	ERIAS	FENDLERELLA	FENDL2	GAZANIA	GAZAN
ERICA	ERICA	FEROCACTUS	FEROC	GELSEMIUM	GELSE
ERICAMERIA	ERICA2	FESTUCA	FESTU	GENIPA	GENIP
ERIGENIA	ERIGE	FEVILLEA	FEVIL	GENISTA	GENIS
ERIGERON	ERIGE2	FICUS	FICUS	GENISTIDIUM	GENIS2
ERIOCAULON	ERIOC	FILAGINELLA	FILAG2	GENTIANA	GENTI
ERIOCHLOA	ERIOC2	FILAGO	FILAG	GENTIANELLA	GENTI2
ERIOCHRYSIS	ERIOC3	FILICIUM	FILIC	GENTIANOPSIS	GENTI3
ERIODICTYON	ERIOD	FILIPENDULA	FILIP	GEOCARPON	GEOCA2
ERIOGONUM	ERIOG	FIMBRISTYLIS	FIMBR	GEOCAULON	GEOCA
ERIONEURON	ERION	FIRMIANA	FIRMI	GEOPHILA	GEOPH
ERIOPHORUM	ERIOP	FLACOURTIA	FLACO	GERAEA	GERAE
ERIOPHYLLUM	ERIOP2	FLAVERIA	FLAVE	GERANIUM	GERAN
ERIOSORUS	ERIOS	FLEISCHMANNIA	FLEIS	GESNERIA	GESNE
ERITHALIS	ERITH	FLEURYA	FLEUR	GEUM	GEUM+
ERITRICHIUM	ERITR	FLOERKEA	FLOER	GHINIA	GHINI
ERNODEA	ERNOD	FLORESTINA	FLORE	GIBASIS	GIBAS
ERODIUM	ERODI	FLOURENSIA	FLOUR	GILIA	GILIA
ERRAZURIZIA	ERRO7	FLUGGEA	FLUGG	GILMANIA	GILMA
ERUCA	ERUCA	FLYRIELLA	FLYRI	GINORIA	GINOR
ERUCASTRUM	ERUCA2	FOENICULUM	FOENI	GITHOPSIS	GITHO
ERYNGIUM	ERYNG	FORESTIERA	FORES	GLADIOLUS	GLADI
ERYSIMUM	ERYSI	FORSELLESIA	FORSE	GLANDULARIA	GLAND
ERYTHRINA	ERYTH	FORSTERONIA	FORST	GLAUCIUM	GLAUC
ERYTHRODES	ERYTH2	FORSYTHIA	FORSY	GLAUCOCARPUM	GLAUC2
ERYTHRONIUM	ERYTH3	FOTHERGILLA	FOTHE	GLAUX	GLAUX
ERYTHROXYLUM	ERYTH5	FOUQUIERIA	FOUQU	GLECOMA	GLECO
ESCHSCHOLZIA	ESCHS	FRAGARIA	FRAGA	GLEDITSIA	GLEDI
ESENBECKIA	ESENB	FRANKENIA	FRANK	GLEHNIA	GLEHN
EUCALYPTUS	EUCAL	FRANKLINIA	FRANK2	GLEICHENIA	GLEIC
EUCLASTA	EUCLA	FRAXINUS	FRAXI	GLINUS	GLINU
EUCLIDIUM	EUCLI	FREESIA	FREES	GLIRICIDIA	GLIRI
EUCNIDE	EUCNI	FREMONTODENDRON	FREMO2	GLYCERIA	GLYCE
EUCRYPTA	EUCRY	FREYCINETIA	FREYC	GLYCINE	GLYCI
EUGENIA	EUGEN	FRITILLARIA	FRITI	GLYCOSMIS	GLYCO
EULALIA	EULAL	FROELICHIA	FROEL	GLYCYRRHIZA	GLYCY
EULOPHIA	EULOP	FRYXELLIA	FRYXE	GLYPTOPLEURA	GLYPT
EUONYMUS	EUONY	FUCHSIA	FUCHS	GNAPHALIUM	GNAPH
EUPATORIADELPHUS	EUPAT2	FUIRENA	FUIRE	GOCHNATIA	GOCHN
EUPATORIUM	EUPAT	FUMARIA	FUMAR	GOETZEA	GOETZ
EUPHORBIA	EUPHO	FUNTUMIA	FUNTU	GOMIDESIA	GOMID
EUPHRASIA	EUPHR	FURCRAEA	FURCR	GOMPHOCARPUS	GOMPH2
EUROTIA	EUROT	GAHNIA	GAHNI	GOMPHRENA	GOMPH
EURYA	EURYA	GAILLARDIA	GAILL	GONOCALYX	GONOC2
EURYOPS	EURYO	GALACTIA	GALAC	GONOCARPUS	GONOC
EURYSTEMON	EURYS	GALANTHUS	GALAN	GONOLOBUS	GONOL
EURYTAENIA	EURYT	GALARHOEUS	GALAR	GONZALAGUNIA	GONZA
EUSTACHYS	EUSTA	GALAX	GALAX	GOODMANIA	GOODM
EUSTOMA	EUSTO	GALEANDRA	GALEA	GOODYERA	GOODY
EUSTYLIS	EUSTY	GALEARIS	GALEA2	GORDONIA	GORDO
EUTHAMIA	EUTHA	GALEGA	GALEG	GOSSYPIANTHUS	GOSSY2
EUTREMA	EUTRE	GALENIA	GALEN	GOSSYPIUM	GOSSY
EVAX	EVAX+	GALEOPSIS	GALEO	GOUANIA	GOUAN
EVOLVULUS	EVOLV	GALINSOGA	GALIN	GOULDIA	GOULD

GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL
GOVENIA	GOVEN	HEDERA	HEDER	HIPPOMANE	HIPPO
GRAMMADENIA	GRAMM2	HEDYCHIUM	HEDYC	HIPPURIS	HIPPU
GRAMMITIS	GRAMM	HEDYOSMUM	HEDYO	HIRAEA	HIRAE
GRAPTOPETALUM	GRAPT	HEDYOTIS	HEDYO2	HIRSHFELDIA	HIRSH
GRAPTOPHYLLUM	GRAPT2	HEDYPNOIS	HEDYP	HIRTELLA	HIRTE
GRATIOLA	GRATI	HEDYSARUM	HEDYS	HISTIOPTERIS	HISTI
GRAYIA	GRAYI	HEIMIA	HEIMI	HOFFMANSEGGIA	HOFFM
GREENELLA	GREEN	HELENIUM	HELEN	HOHENBERGIA	HOHEN
GREVILLEA	GREVI	HELIANTHELLA	HELIA	HOLACANTHA	HOLAC
GRINDELIA	GRIND	HELIANTHEMUM	HELIA2	HOLCUS	HOLCU
GUAIACUM	GUAIA	HELIANTHUS	HELIA3	HOLLISTERIA	HOLLI
GUAPIRA	GUAPI	HELICHRYSUM	HELIC4	HOLMSKIOLDIA	HOLMS
GUARDIOLA	GUARD	HELICONIA	HELIC2	HOLOCARPHA	HOLOC
GUAREA	GUARE	HELICTERES	HELIC3	HOLODISCUS	HOLOD
GUATTERIA	GUATT	HELICTOTRICHON	HELIC	HOLOSTEUM	HOLOS
GUAZUMA	GUAZU	HELIETTA	HELIE	HOLOZONIA	HOLOZ
GUETTARDA	GUETT	HELIOMERIS	HELIO4	HOMALIUM	HOMAL
GUILLEMINEA	GUILL	HELIOPSIS	HELIO2	HONKENYA	HONKE
GUIZOTIA	GUIZO	HELIOTROPIUM	HELIO3	HORDEUM	HORDE
GUNDLACHIA	GUNDL	HELLEBORUS	HELLE	HORKELIA	HORKE
GUNNERA	GUNNE	HELONIAS	HELON	HORNEMANNIA	HORNE
GUTIERREZIA	GUTIE	HEMARTHRIA	HEMAR	HORSFORDIA	HORSF
GUZMANIA	GUZMA	HEMEROCALLIS	HEMER	HOSTA	HOSTA
GYMINDA	GYMIN	HEMIANTHUS	HEMIA	HOTTONIA	HOTTO
GYMNADENIA	GYMNA2	HEMICARPHA	HEMIC	HOUSTONIA	HOUST
GYMNANTHES	GYMNA	HEMIDICTYUM	HEMID	HOVENIA	HOVEN
GYMNOCARPIUM	GYMNO	HEMIEVA	HEMIE	HOWELLIA	HOWEL
GYMNOCLADUS	GYMNO2	HEMIONITIS	HEMIO	HOYA	HOYA+
GYMNOPOGON	GYMNO3	HEMITOMES	HEMIT	HUDSONIA	HUDSO
GYMNOSIPHON	GYMNO4	HEMIZONIA	HEMIZ	HULSEA	HULSE
GYMNOSPERMA	GYMNO6	HENRIETTELLA	HENRI	HUMULUS	HUMUL
GYMNOSTERIS	GYMNO5	HEPATICA	HEPAT	HUNNEMANNIA	HUNNE
GYMNOSTYLES	GYMNO7	HERACLEUM	HERAC	HURA	HURA+
GYNERIUM	GYNER	HERBERTIA	HERBE	HYBANTHUS	HYBAN
GYNURA	GYNUR	HERISSANTIA	HERIS	HYDRANGEA	HYDRA
GYPSOPHILA	GYPSO	HERMANNIA	HERMA	HYDRASTIS	HYDRA2
HABENARIA	HABEN	HERNANDIA	HERNA	HYDRILLA	HYDRI
HABRANTHUS	HABRA	HERNIARIA	HERNI	HYDROCHLOA	HYDRO
HACKELIA	HACKE	HERREA	HERRE	HYDROCLEYS	HYDRO6
HACKELOCHLOA	HACKE2	HESPERALOE	HESPE	HYDROCOTYLE	HYDRO2
HAEMATOXYLUM	HAEMA2	HESPERIS	HESPE2	HYDROLEA	HYDRO3
HAENIANTHUS	HAENI	HESPEROCALLIS	HESPE3	HYDROPHYLAX	HYDRO7
HALENIA	HALEN	HESPEROCHIRON	HESPE4	HYDROPHYLLUM	HYDRO4
HALESIA	HALES	HESPEROCNIDE	HESPE6	HYERONIMA	HYERO
HALIMOLOBOS	HALIM	HESPEROLINON	HESPE7	HYGROPHILA	HYGRO
HALODULE	HALOD	HESPEROMANNIA	HESPE8	HYLOCEREUS	HYLOC
HALOGETON	HALOG	HETERANTHERA	HETER	HYMENACHNE	HYMEN8
HALOPHILA	HALOP	HETEROCENTRON	HETER11	HYMENAEA	HYMEN
HALORAGIS	HALOR	HETEROCODON	HETER2	HYMENOCALLIS	HYMEN2
HAMAMELIS	HAMAM	HETEROGAURA	HETER4	HYMENOCLEA	HYMEN3
HAMELIA	HAMEL	HETEROMELES	HETER5	HYMENOLOBUS	HYMEN9
HAPLOESTHES	HAPLO	HETEROPOGON	HETER6	HYMENOPAPPUS	HYMEN4
HAPLOPAPPUS	HAPLO2	HETEROPTERIS	HETER10	HYMENOPHYLLUM	HYMEN5
HAPLOPHYTON	HAPLO3	HETEROSPERMA	HETER7	HYMENOTHRIX	HYMEN6
HAPLOSTACHYS	HAPLO4	HETEROTHECA	HETER8	HYMENOXYS	HYMEN7
HARBOURIA	HARBO	HETEROTRICHUM	HETER9	HYOSCYAMUS	HYOSC
HARPAGONELLA	HARPA	HEUCHERA	HEUCH	HYPARRHENIA	HYPAR
HARPEROCALLIS	HARPE	HEXALECTRIS	HEXAL	HYPELATE	HYPEL
HARRIMANELLA	HARRI3	HEXASTYLIS	HEXAS	HYPERBAENA	HYPER2
HARRISELLA	HARRI	HIBISCADELPHUS	HIBIS	HYPERICUM	HYPER
HARRISIA	HARRI2	HIBISCUS	HIBIS2	HYPOCHAERIS	HYPOC
HARTWRIGHTIA	HARTW	HIERACIUM	HIERA	HYPODERRIS	HYPOD
HASTEOLA	HASTE	HIEROCHLOE	HIERO	HYPOGYNIUM	HYPOG
HEBE	HEBE+	HILARIA	HILAR	HYPOLEPIS	HYPOL
HEBECLINIUM	HEBEC	HILLEBRANDIA	HILLE	HYPOPITYS	HYPOP
HECASTOCLEIS	HECAS	HILLIA	HILLI	HYPOXIS	HYPOX
HECHTIA	HECHT	HIPPEASTRUM	HIPPE	HYPTIS	HYPTI
HECISTOPTERIS	HECIS	HIPPOBROMA	HIPPO3	HYSSOPUS	HYSSO
HEDEOMA	HEDEO	HIPPOCRATEA	HIPPO2	HYSTRIX	HYSTR

43

GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL
IBERIS	IBERI	KHAYA	KHAYA	LEMBERTIA	LEMBE
IBERVILLEA	IBERV	KICKXIA	KICKX	LEMMONIA	LEMMO
IBICELLA	IBICE	KNAUTIA	KNAUT	LEMNA	LEMNA
ICHNANTHUS	ICHNA	KOANOPHYLLON	KOANO	LENDNERIA	LENDN
IDAHOA	IDAHO	KOBRESIA	KOBRE	LENOPHYLLUM	LENOP
ILEX	ILEX+	KOCHIA	KOCHI	LENS	LENS+
ILIAMNA	ILIAM	KOEBERLINIA	KOEBE	LEOCHILUS	LEOCH
ILLICIUM	ILLIC	KOELERIA	KOELE	LEONOTIS	LEONO
ILYSANTHES	ILYSA	KOELLENSTEINIA	KOELL	LEONTODON	LEONT
IMPATIENS	IMPAT	KOELREUTERIA	KOELR	LEONURUS	LEONU
IMPERATA	IMPER	KOENIGIA	KOENI	LEPANTHES	LEPAN
INDIGOFERA	INDIG	KOKIA	KOKIA	LEPANTHOPSIS	LEPAN2
INGA	INGA+	KORTHALSELLA	KORTH	LEPECHINIA	LEPEC
INODES	INODE	KOSTELETZKYA	KOSTE	LEPIDIUM	LEPID
INULA	INULA	KOYAMACALIA	KOYAM	LEPIDOSPARTUM	LEPID2
IODANTHUS	IODAN	KRAMERIA	KRAME	LEPTARRHENA	LEPTA
IONOPSIS	IONOP2	KRIGIA	KRIGI	LEPTOCEREUS	LEPTO7
IPHEION	IPHEI	KRUGIODENDRON	KRUGI	LEPTOCHLOA	LEPTO
IPOMOEA	IPOMO	LABLAB	LABLA	LEPTOCHLOOPSIS	LEPTO5
IPOMOPSIS	IPOMO2	LABORDIA	LABOR	LEPTOCORYPHIUM	LEPTO6
IRESINE	IRESI	LABURNUM	LABUR	LEPTODACTYLON	LEPTO2
IRIS	IRIS+	LACHNANTHES	LACHN2	LEPTOGLOSSIS	LEPTO8
ISACHNE	ISACH	LACHNOCAULON	LACHN	LEPTOLOMA	LEPTO3
ISATIS	ISATI	LACHNOSTOMA	LACHN3	LEPTOSPERMUM	LEPTO4
ISCHAEMUM	ISCHA	LACTUCA	LACTU	LEPTURUS	LEPTU
ISOCARPHA	ISOCA	LAETIA	LAETI	LEPUROPETALON	LEPUR
ISOCHILUS	ISOCH	LAGASCEA	LAGAS	LESPEDEZA	LESPE
ISOCOMA	ISOCO	LAGENARIA	LAGEN	LESQUERELLA	LESQU
ISODENDRION	ISODE	LAGENIFERA	LAGEN3	LESSINGIA	LESSI
ISOETES	ISOET	LAGENOCARPUS	LAGEN2	LEUCAENA	LEUCA
ISOMERIS	ISOME	LAGERSTROEMIA	LAGER	LEUCANTHEMUM	LEUCA4
ISOTRIA	ISOTR	LAGOPHYLLA	LAGOP	LEUCAS	LEUCA3
ITEA	ITEA+	LAGOTIS	LAGOT	LEUCELENE	LEUCE
IVA	IVA++	LAGUNARIA	LAGUN	LEUCOCRINUM	LEUCO
IVESIA	IVESI	LAGUNCULARIA	LAGUN2	LEUCOJUM	LEUCO2
IXOPHORUS	IXOPH	LAGURUS	LAGUR	LEUCOPHYLLUM	LEUCO3
IXORA	IXORA	LAMARCKIA	LAMAR	LEUCOPHYSALIS	LEUCO7
JABOROSA	JABOR	LAMIUM	LAMIU	LEUCOPOA	LEUCO6
JACARANDA	JACAR	LAMPRANTHUS	LAMPR	LEUCOSPORA	LEUCO4
JACOBINIA	JACOB	LANGLOISIA	LANGL	LEUCOTHOE	LEUCO5
JACQUEMONTIA	JACQU	LANTANA	LANTA	LEVISTICUM	LEVIS
JACQUINIELLA	JACQU3	LAPLACEA	LAPLA	LEWISIA	LEWIS
JAMESIA	JAMES	LAPORTEA	LAPOR	LIATRIS	LIATR
JAMESIANTHUS	JAMES2	LAPPULA	LAPPU	LIBERTIA	LIBER
JANUSIA	JANUS	LAPSANA	LAPSA	LIBOCEDRUS	LIBOC
JAQUINIA	JAQUI	LARIX	LARIX	LICANIA	LICAN
JASIONE	JASIO	LARREA	LARRE	LICARIA	LICAR
JASMINUM	JASMI	LASIACIS	LASIA	LIGUSTICUM	LIGUS
JATROPHA	JATRO	LASIANTHAEA	LASIA3	LIGUSTRUM	LIGUS2
JAUMEA	JAUME	LASIANTHUS	LASIA2	LILAEA	LILAE
JEFFERSONIA	JEFFE	LASTARRIAEA	LASTA	LILAEOPSIS	LILAE2
JEPSONIA	JEPSO	LASTHENIA	LASTH	LILIUM	LILIU
JOINVILLEA	JOINV	LASTREOPSIS	LASTR	LIMNANTHES	LIMNA
JONOPSIDIUM	JONOP	LATHYRUS	LATHY	LIMNOBIUM	LIMNO
JUGLANS	JUGLA	LAUNAEA	LAUNA	LIMNODEA	LIMNO2
JULOCROTON	JULOC	LAVATERA	LAVAT	LIMNOPHILA	LIMNO4
JUNCUS	JUNCU	LAWSONIA	LAWSO	LIMNOSCIADIUM	LIMNO3
JUNIPERUS	JUNIP	LAYIA	LAYIA	LIMONIUM	LIMON
JUSTICIA	JUSTI	LEAVENWORTHIA	LEAVE	LIMOSELLA	LIMOS
KAEMPFERIA	KAEMP	LECHEA	LECHE	LINANTHUS	LINAN2
KALANCHOE	KALAN	LEDUM	LEDUM	LINARIA	LINAR
KALLSTROEMIA	KALLS	LEERSIA	LEERS	LINDERA	LINDE2
KALMIA	KALMI	LEGENERE	LEGEN	LINDERNIA	LINDE
KARWINSKIA	KARWI	LEGOUSIA	LEGOU	LINDHEIMERA	LINDH
KECKIELLA	KECKI	LEIANDRA	LEIAN	LINDSAEA	LINDS
KELLOGGIA	KELLO	LEIOPHYLLUM	LEIOP	LINNAEA	LINNA
KELSEYA	KELSE	LEIPHAIMOS	LEIPH	LINOCIERA	LINOC
KERRIA	KERRI	LEITNERIA	LEITN	LINUM	LINUM
KEYSSERIA	KEYSS	LEMAIREOCEREUS	LEMAI	LIPARIS	LIPAR

GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL
LIPOCARPHA	LIPOC	MACHAEROCARPUS	MACHA3	MELAMPODIUM	MELAM
LIPOCHAETA	LIPOC2	MACHAONIA	MACHA5	MELAMPYRUM	MELAM2
LIPPIA	LIPPI	MACLEAYA	MACLE	MELANTHERA	MELAN2
LIQUIDAMBAR	LIQUI	MACLURA	MACLU	MELANTHIUM	MELAN3
LIRIODENDRON	LIRIO	MACRADENIA	MACRA	MELASTOMA	MELAS
LISIANTHIUS	LISIA	MACRANTHERA	MACRA2	MELIA	MELIA
LISTERA	LISTE	MACROMERIA	MACRO	MELICA	MELIC
LITHACHNE	LITHA	MACROSIPHONIA	MACRO2	MELICOCCUS	MELIC2
LITHOCARPUS	LITHO	MACROTHELYPTERIS	MACRO3	MELILOTUS	MELIL
LITHOPHILA	LITHO4	MADIA	MADIA	MELINIS	MELIN
LITHOPHRAGMA	LITHO2	MAGNOLIA	MAGNO	MELIOSMA	MELIO
LITHOSPERMUM	LITHO3	MAHONIA	MAHON	MELISSA	MELIS
LITRISA	LITRI	MAIANTHEMUM	MAIAN	MELLICHAMPIA	MELLI
LITSEA	LITSE	MALACHRA	MALAC	MELOCACTUS	MELOC2
LITTORELLA	LITTO	MALACOTHAMNUS	MALAC2	MELOCHIA	MELOC
LLOYDIA	LLOYD	MALACOTHRIX	MALAC3	MELOTHRIA	MELOT
LOBELIA	LOBEL	MALAXIS	MALAX	MENISPERMUM	MENIS
LOBULARIA	LOBUL	MALCOLMIA	MALCO2	MENODORA	MENOD
LOEFLINGIA	LOEFL	MALPERIA	MALPE	MENTHA	MENTH
LOESELIA	LOESE	MALPIGHIA	MALPI	MENTZELIA	MENTZ
LOGFIA	LOGFI	MALUS	MALUS	MENYANTHES	MENYA
LOISELEURIA	LOISE	MALVA	MALVA	MENZIESIA	MENZI
LOLIUM	LOLIU	MALVASTRUM	MALVA2	MERCURIALIS	MERCU
LOMAGRAMMA	LOMAG	MALVAVISCUS	MALVA3	MERREMIA	MERRE
LOMARIOPSIS	LOMAR	MALVELLA	MALVE	MERTENSIA	MERTE
LOMATIUM	LOMAT	MAMMEA	MAMME	METASTELMA	METAS
LOMATOGONIUM	LOMAT2	MAMMILLARIA	MAMMI	METOPIUM	METOP
LONCHITIS	LONCH2	MANCOA	MANCO	METROSIDEROS	METRO
LONCHOCARPUS	LONCH	MANFREDA	MANFR	MEXIMALVA	MEXIM
LONICERA	LONIC	MANGIFERA	MANGI	MEZONEVRON	MEZON
LOPHIOLA	LOPHI	MANIHOT	MANIH	MIBORA	MIBOR
LOPHOPHORA	LOPHO2	MANILKARA	MANIL	MICHELIELLA	MICHE
LOPHOSORIA	LOPHO3	MANISURIS	MANIS	MICONIA	MICON
LOTUS	LOTUS	MANTISALCA	MANTI	MICRANTHEMUM	MICRA
LUCYA	LUCYA	MAPPIA	MAPPI	MICRANTHES	MICRA2
LUDWIGIA	LUDWI	MARAH	MARAH	MICROCHLOA	MICRO
LUETKEA	LUETK	MARANTA	MARAN	MICROGRAMMA	MICRO9
LUFFA	LUFFA	MARATTIA	MARAT	MICROLAENA	MICRO2
LUINA	LUINA	MARCGRAVIA	MARCG	MICROLEPIA	MICRO3
LUNANIA	LUNAN	MARGARANTHUS	MARGA	MICROPHOLIS	MICRO4
LUNARIA	LUNAR	MARGARITARIA	MARGA2	MICROPUS	MICRO5
LUPINUS	LUPIN	MARINA	MARIN	MICROPYXIS	MICRO11
LUZIOLA	LUZIO	MARLIEREA	MARLI	MICROSERIS	MICRO6
LUZULA	LUZUL	MARRUBIUM	MARRU	MICROSTERIS	MICRO8
LYCHNIS	LYCHN	MARSDENIA	MARSD	MICROTEA	MICRO10
LYCIANTHES	LYCIA	MARSHALLIA	MARSH	MIKANIA	MIKAN
LYCIUM	LYCIU	MARSILEA	MARSI	MILIUM	MILIU
LYCOPERSICON	LYCOP	MARSYPIANTHES	MARSY	MILLA	MILLA
LYCOPODIUM	LYCOP2	MARTYNIA	MARTY	MIMETANTHE	MIMET
LYCOPSIS	LYCOP3	MASTICHODENDRON	MASTI	MIMOSA	MIMOS
LYCOPUS	LYCOP4	MATAYBA	MATAY	MIMULUS	MIMUL
LYCORIS	LYCOR	MATELEA	MATEL	MINUARTIA	MINUA
LYCURUS	LYCUR	MATRICARIA	MATRI	MIRABILIS	MIRAB
LYGODESMIA	LYGOD	MATTEUCCIA	MATTE	MISCANTHUS	MISCA
LYGODIUM	LYGOD2	MATTHIOLA	MATTH	MITCHELLA	MITCH
LYONIA	LYONI	MAURANDYA	MAURA	MITELLA	MITEL
LYONOTHAMNUS	LYONO	MAXILLARIA	MAXIL	MITRACARPUS	MITRA
LYROCARPA	LYROC	MAYACA	MAYAC	MODIOLA	MODIO
LYSICHITON	LYSIC	MAYTENUS	MAYTE	MOEHRINGIA	MOEHR
LYSILOMA	LYSIL	MAZUS	MAZUS	MOENCHIA	MOENC
LYSIMACHIA	LYSIM	MECARDONIA	MECAR	MOHAVEA	MOHAV
LYTHRUM	LYTHR	MECONELLA	MECON	MOLINIA	MOLIN
MACADAMIA	MACAD	MECRANIUM	MECRA	MOLLUGO	MOLLU
MACBRIDEA	MACBR	MEDEOLA	MEDEO	MOLUCCELLA	MOLUC
MACDOUGALIA	MACDO	MEDICAGO	MEDIC	MOMORDICA	MOMOR
MACFADYENA	MACFA	MEEHANIA	MEEHA	MONANTHOCHLOE	MONAN
MACHAERANTHERA	MACHA	MEGALODONTA	MEGAL	MONARDA	MONAR
MACHAERINA	MACHA2	MEIBOMIA	MEIBO	MONARDELLA	MONAR2
MACHAERIUM	MACHA4	MELALEUCA	MELAL	MONERMA	MONER

GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL
MONESES	MONES	NEORUDOLPHIA	NEORU	ONONIS	ONONI
MONNINA	MONNI	NEOSTAPFIA	NEOST	ONOPORDUM	ONOPO
MONOCHORIA	MONOC	NEOWAWRAEA	NEOWA	ONOSMODIUM	ONOSM
MONOLEPIS	MONOL	NEPETA	NEPET	OPERCULINA	OPERC
MONOLOPIA	MONOL2	NEPHELEA	NEPHE	OPHIOGLOSSUM	OPHIO
MONOPTILON	MONOP	NEPHROLEPIS	NEPHR	OPLISMENUS	OPLIS
MONOTROPA	MONOT	NEPHROPETALUM	NEPHR2	OPLONIA	OPLON
MONOTROPSIS	MONOT2	NEPSERA	NEPSE	OPLOPANAX	OPLOP
MONROA	MONRO	NEPTUNIA	NEPTU	OPUNTIA	OPUNT
MONTANOA	MONTA	NERAUDIA	NERAU	ORBEXILUM	ORBEX
MONTIA	MONTI	NERISYRENIA	NERIS	ORCUTTIA	ORCUT
MONTRICHARDIA	MONTR	NERIUM	NERIU	OREOBOLUS	OREOB
MORELOTIA	MOREL	NERTERA	NERTE	OREONANA	OREON
MORINDA	MORIN	NESAEA	NESAE	OREOXIS	OREOX
MORINGA	MORIN2	NESLIA	NESLI	ORIGANUM	ORIGA
MORISONIA	MORIS	NESOLUMA	NESOL	ORMOSIA	ORMOS
MORTONIA	MORTO	NESTRONIA	NESTR	ORNITHOGALUM	ORNIT
MORUS	MORUS	NEURODIUM	NEURO	ORNITHOPUS	ORNIT2
MOSLA	MOSLA	NEUROLAENA	NEURO2	ORNITHOSTAPHYLOS	ORNIT3
MOURIRI	MOURI	NEVIUSIA	NEVIU	OROBANCHE	OROBA
MUCRONEA	MUCRO	NEYRAUDIA	NEYRA	OROCHAENACTIS	OROCH
MUCUNA	MUCUN	NICANDRA	NICAN	OROGENIA	OROGE
MUHLENBERGIA	MUHLE	NICOLLETIA	NICOL	ORONTIUM	ORONT
MUILLA	MUILL	NICOTIANA	NICOT	ORTHOCARPUS	ORTHO
MUNROIDENDRON	MUNRO2	NIEREMBERGIA	NIERE	ORTHOPAPPUS	ORTHO2
MUNTINGIA	MUNTI	NIGELLA	NIGEL	ORYCTES	ORYCT
MUNZOTHAMNUS	MUNZO	NIPHIDIUM	NIPHI	ORYZA	ORYZA
MURDANNIA	MURDA	NISSOLIA	NISSO	ORYZOPSIS	ORYZO
MURRAYA	MURRA	NITROPHILA	NITRO	OSMANTHUS	OSMAN
MUSA	MUSA+	NOLINA	NOLIN	OSMORHIZA	OSMOR
MUSCARI	MUSCA	NONEA	NONEA	OSMUNDA	OSMUN
MUSINEON	MUSIN	NOTHOCALAIS	NOTHO5	OSSAEA	OSSAE
MYAGRUM	MYAGR	NOTHOCESTRUM	NOTHO3	OSTEOMELES	OSTEO
MYOPORUM	MYOPO	NOTHOCHELONE	NOTHO4	OSTRYA	OSTRY
MYOSOTIS	MYOSO	NOTHOLAENA	NOTHO	OTTELIA	OTTEL
MYOSOTON	MYOSO2	NOTHOSCORDUM	NOTHO2	OTTOSCHULZIA	OTTOS
MYOSURUS	MYOSU	NOTOTRICHIUM	NOTOT	OURATEA	OURAT
MYRCIA	MYRCI	NUPHAR	NUPHA	OXALIS	OXALI
MYRCIANTHES	MYRCI2	NYACHIA	NYACH	OXANDRA	OXAND
MYRCIARIA	MYRCI3	NYCTAGINIA	NYCTA	OXYDENDRUM	OXYDE
MYRICA	MYRIC	NYMPHAEA	NYMPH	OXYPETALUM	OXYPE
MYRIOPHYLLUM	MYRIO	NYMPHOIDES	NYMPH2	OXYPOLIS	OXYPO
MYRRHIS	MYRRH	NYSSA	NYSSA	OXYRHYNCHUS	OXYRH
MYRSINE	MYRSI	OBOLARIA	OBOLA	OXYRIA	OXYRI
MYRTUS	MYRTU	OCHROMA	OCHRO	OXYSPORA	OXYSP
NAJAS	NAJAS	OCHROSIA	OCHRO2	OXYSTYLIS	OXYST
NAMA	NAMA+	OCIMUM	OCIMU	OXYTHECA	OXYTH
NANDINA	NANDI	OCOTEA	OCOTE	OXYTROPIS	OXYTR
NAPAEA	NAPAE	ODONTITES	ODONT4	PACHIRA	PACHI
NARCISSUS	NARCI	ODONTONEMA	ODONT5	PACHYRHIZUS	PACHY2
NARDUS	NARDU	ODONTOSORIA	ODONT	PACHYSANDRA	PACHY3
NARENGA	NAREN	ODONTOSTEPHANA	ODONT3	PAEDERIA	PAEDE
NARTHECIUM	NARTH	ODONTOSTOMUM	ODONT2	PAEONIA	PAEON
NASSELLA	NASSE	OECEOCLADES	OECEO	PALAFOXIA	PALAF
NASTURTIUM	NASTU	OEMLERIA	OEMLE	PALICOUREA	PALIC
NAVARRETIA	NAVAR	OENANTHE	OENAN	PANAX	PANAX
NECTANDRA	NECTA	OENOTHERA	OENOT	PANCRATIUM	PANCR
NECTOUXIA	NECTO	OKENIA	OKENI	PANDANUS	PANDA
NEEA	NEEA+	OLDENLANDIA	OLDEN	PANICUM	PANIC
NELSONIA	NELSO	OLEA	OLEA+	PAPAVER	PAPAV
NELUMBO	NELUM	OLEANDRA	OLEAN	PAPPOPHORUM	PAPPO
NEMACAULIS	NEMAC	OLIGOMERIS	OLIGO	PARAPHOLIS	PARAP
NEMACLADUS	NEMAC2	OLNEYA	OLNEY	PARATHESIS	PARAT
NEMASTYLIS	NEMAS	OLYRA	OLYRA	PARENTUCELLIA	PAREN
NEMOPANTHUS	NEMOP2	OMALOTHECA	OMALO	PARIETARIA	PARIE
NEMOPHILA	NEMOP	OMPHALODES	OMPHA	PARISHELLA	PARIS
NEOLAUGERIA	NEOLA	ONCIDIUM	ONCID	PARKINSONIA	PARKI2
NEOLLOYDIA	NEOLL	ONOBRYCHIS	ONOBR	PARNASSIA	PARNA
NEOPARRYA	NEOPA	ONOCLEA	ONOCL	PARONYCHIA	PARON

GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL
PARRYA	PARRY	PHAULOTHAMNUS	PHAUL	PITHECELLOBIUM	PITHE
PARRYELLA	PARRY2	PHELLODENDRON	PHELL	PITTOSPORUM	PITTO
PARTHENICE	PARTH	PHEROTRICHIS	PHERO	PITYOPUS	PITYO
PARTHENIUM	PARTH2	PHIALANTHUS	PHIAL	PITYROGRAMMA	PITYR
PARTHENOCISSUS	PARTH3	PHILADELPHUS	PHILA	PLAGIOBOTHRYS	PLAGI
PASPALIDIUM	PASPA	PHILODENDRON	PHILO	PLANCHONELLA	PLANC
PASPALUM	PASPA2	PHILOXERUS	PHILO2	PLANERA	PLANE
PASSIFLORA	PASSI	PHIPPSIA	PHIPP	PLANTAGO	PLANT
PASTINACA	PASTI	PHLEBODIUM	PHLEB	PLATANTHERA	PLATA2
PAULLINIA	PAULL	PHLEUM	PHLEU	PLATANUS	PLATA
PAULOWNIA	PAULO	PHLOMIS	PHLOM	PLATYCODON	PLATY4
PAVONIA	PAVON	PHLOX	PHLOX	PLATYDESMA	PLATY
PAXISTIMA	PAXIS	PHOEBANTHUS	PHOEB2	PLATYSCHKUHRIA	PLATY5
PECTIS	PECTI	PHOEBE	PHOEB	PLATYSTEMON	PLATY3
PECTOCARYA	PECTO	PHOENICAULIS	PHOEN	PLECTRANTHUS	PLECT2
PEDICULARIS	PEDIC	PHOENIX	PHOEN2	PLECTRITIS	PLECT
PEDILANTHUS	PEDIL	PHOLISMA	PHOLI	PLEEA	PLEEA
PEDIOCACTUS	PEDIO	PHOLISTOMA	PHOLI2	PLEODENDRON	PLEOD
PEDIOMELUM	PEDIO2	PHORADENDRON	PHORA	PLEOMELE	PLEOM
PEGANUM	PEGAN	PHRAGMITES	PHRAG	PLEOPELTIS	PLEOP
PELARGONIUM	PELAR2	PHRYMA	PHRYM	PLEURICOSPORA	PLEUR
PELEA	PELEA	PHYLA	PHYLA	PLEUROCORONIS	PLEUR4
PELLAEA	PELLA	PHYLLANTHUS	PHYLL	PLEUROPOGON	PLEUR2
PELTANDRA	PELTA	PHYLLITIS	PHYLL2	PLEUROTHALLIS	PLEUR3
PELTAPTERIS	PELTA2	PHYLLODOCE	PHYLL3	PLUCHEA	PLUCH
PELTIPHYLLUM	PELTI	PHYLLOSPADIX	PHYLL4	PLUMBAGO	PLUMB
PELTOPHORUM	PELTO	PHYLLOSTACHYS	PHYLL6	PLUMERIA	PLUME
PENNELLIA	PENNE	PHYLLOSTEGIA	PHYLL5	PLUMMERA	PLUMM
PENNISETUM	PENNI	PHYSALIS	PHYSA	POA	POA++
PENSTEMON	PENST	PHYSARIA	PHYSA2	PODAGROSTIS	PODAG
PENTAGLOTTIS	PENTA2	PHYSOCARPUS	PHYSO	PODISTERA	PODIS
PENTAPETES	PENTA	PHYSOSTEGIA	PHYSO2	PODOCARPUS	PODOC
PENTHORUM	PENTH	PHYTOLACCA	PHYTO	PODOPHYLLUM	PODOP
PENTODON	PENTO	PIAROPUS	PIARO	PODOSTEMUM	PODOS
PENTZIA	PENTZ	PICEA	PICEA	POGOGYNE	POGOG
PEPEROMIA	PEPER	PICKERINGIA	PICKE	POGONIA	POGON
PEPO	PEPO+	PICRADENIOPSIS	PICRA3	POINSETTIA	POINS
PERAPHYLLUM	PERAP	PICRAMNIA	PICRA	POLANISIA	POLAN
PERESKIA	PERES	PICRASMA	PICRA2	POLEMONIUM	POLEM
PEREZIA	PEREZ	PICRIS	PICRI	POLIOMINTHA	POLIO
PERICOME	PERIC	PICTETIA	PICTE	POLYBOTRYA	POLYB
PERIDERIDIA	PERID	PIERIS	PIERI	POLYCARPAEA	POLYC3
PERILLA	PERIL	PILEA	PILEA	POLYCARPON	POLYC
PERIPLOCA	PERIP	PILOCARPUS	PILOC	POLYCTENIUM	POLYC2
PERITYLE	PERIT	PILOSOCEREUS	PILOS2	POLYGALA	POLYG
PERROTTETIA	PERRO	PILOSTYLES	PILOS	POLYGONATUM	POLYG2
PERSEA	PERSE	PILULARIA	PILUL	POLYGONELLA	POLYG3
PETALONYX	PETAL	PIMENTA	PIMEN	POLYGONUM	POLYG4
PETASITES	PETAS	PIMPINELLA	PIMPI	POLYMNIA	POLYM
PETERIA	PETER	PINAROPAPPUS	PINAR	POLYPODIUM	POLYP
PETITIA	PETIT	PINCKNEYA	PINCK	POLYPOGON	POLYP2
PETIVERIA	PETIV	PINELLIA	PINEL	POLYPREMUM	POLYP3
PETRADORIA	PETRA	PINGUICULA	PINGU	POLYRRHIZA	POLYR
PETREA	PETRE	PINUS	PINUS	POLYSTACHYA	POLYS3
PETROGENIA	PETRO5	PIPER	PIPER	POLYSTICHOPSIS	POLYS2
PETROPHYTON	PETRO2	PIPERIA	PIPER2	POLYSTICHUM	POLYS
PETRORHAGIA	PETRO	PIPTADENIA	PIPTA	POLYTAENIA	POLYT
PETROSELINUM	PETRO3	PIPTOCARPHA	PIPTO2	POLYTAENIUM	POLYT4
PETUNIA	PETUN	PIPTOCHAETIUM	PIPTO	POLYTOCA	POLYT2
PEUCEDANUM	PEUCE	PIPTOCOMA	PIPTO3	POLYTRIAS	POLYT3
PEUCEPHYLLUM	PEUCE2	PIPTURUS	PIPTU	PONCIRUS	PONCI
PHACELIA	PHACE	PIRIQUETA	PIRIQ	PONGAMIA	PONGA
PHAEOSPHAERION	PHAEO	PISCIDIA	PISCI	PONTEDERIA	PONTE
PHAIUS	PHAIU	PISONIA	PISON	PONTHIEVA	PONTH
PHALACROSERIS	PHALA	PISTACIA	PISTA	POPULUS	POPUL
PHALARIS	PHALA2	PISTIA	PISTI	PORANA	PORAN
PHANOPYRUM	PHANO	PISUM	PISUM	POROPHYLLUM	POROP
PHARUS	PHARU	PITCAIRNIA	PITCA	PORTERANTHUS	PORTE2
PHASEOLUS	PHASE	PITCHERIA	PITCH	PORTERELLA	PORTE

GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL
PORTULACA	PORTU	PYRRHOPAPPUS	PYRRH	RONDELETIA	RONDE
POSIDONIA	POSID	PYRULARIA	PYRUL	RORIPPA	RORIP
POTAMOGETON	POTAM	PYRUS	PYRUS	ROSA	ROSA+
POTENTILLA	POTEN	PYXIDANTHERA	PYXID	ROSMARINUS	ROSMA
POUTERIA	POUTE	QUARARIBEA	QUARA	ROTALA	ROTAL
POUZOLZIA	POUZO	QUASSIA	QUASS	ROTHROCKIA	ROTHR
PRENANTHELLA	PRENA2	QUERCUS	QUERC	ROUREA	ROURE
PRENANTHES	PRENA	QUINCULA	QUINC	ROUSSELIA	ROUSS
PRESCOTIA	PRESC	RADIOLA	RADIO	ROYSTONEA	ROYST
PRESTOEA	PREST	RAFINESQUIA	RAFIN	RUBIA	RUBIA
PRESTONIA	PREST2	RAILLARDELLA	RAILL	RUBUS	RUBUS
PRIMULA	PRIMU	RAILLIAUTIA	RAILL2	RUDBECKIA	RUDBE
PRIONOPSIS	PRION	RAINIERA	RAINI	RUELLIA	RUELL
PRISTIMERA	PRIST	RAJANIA	RAJAN	RUGELIA	RUGEL
PRITCHARDIA	PRITC	RANDIA	RANDI	RUMEX	RUMEX
PRIVA	PRIVA	RANUNCULUS	RANUN	RUMOHRA	RUMOH
PROBOSCIDEA	PROBO	RAPANEA	RAPAN	RUPPIA	RUPPI
PROCKIA	PROCK	RAPHANUS	RAPHA	RUSSELIA	RUSSE
PROSERPINACA	PROSE	RAPISTRUM	RAPIS	RUTA	RUTA+
PROSOPIS	PROSO	RATIBIDA	RATIB	RYTIDOPHYLLUM	RYTID
PROUSTIA	PROUS	RAUVOLFIA	RAUVO	SABAL	SABAL
PRUNELLA	PRUNE	RAVENIA	RAVEN	SABATIA	SABAT
PRUNUS	PRUNU	REDFIELDIA	REDFI	SABICEA	SABIC
PSACALIUM	PSACA	REICHARDIA	REICH	SABINEA	SABIN
PSATHYROTES	PSATH	REIMAROCHLOA	REIMA	SACCHARUM	SACCH
PSEUDANAMOMIS	PSEUD12	RELBUNIUM	RELBU	SACCIOLEPIS	SACCI
PSEUDO-ELEPHANTOPUS	PSEUD13	REMYA	REMYA	SACCOLOMA	SACCO
PSEUDOBAHIA	PSEUD2	RENEALMIA	RENEA	SACHSIA	SACHS
PSEUDOCLAPPIA	PSEUD3	RESEDA	RESED	SADLERIA	SADLE
PSEUDOCYMOPTERUS	PSEUD4	RESTREPIELLA	RESTR	SAGERETIA	SAGER
PSEUDOLMEDIA	PSEUD10	REVERCHONIA	REVER	SAGINA	SAGIN
PSEUDOPHEGOPTERIS	PSEUD8	REYNOLDSIA	REYNO	SAGITTARIA	SAGIT
PSEUDOPHOENIX	PSEUD5	REYNOSIA	REYNO2	SALAZARIA	SALAZ
PSEUDOSASA	PSEUD9	RHABDADENIA	RHABD	SALICORNIA	SALIC
PSEUDOSTELLARIA	PSEUD11	RHAGADIOLUS	RHAGA	SALIX	SALIX
PSEUDOTAENIDIA	PSEUD6	RHAMNUS	RHAMN	SALMEA	SALME
PSEUDOTSUGA	PSEUD7	RHAPIDOPHYLLUM	RHAPI	SALPICHROA	SALPI
PSIDIUM	PSIDI	RHEEDIA	RHEED	SALSOLA	SALSO
PSILOCARPHUS	PSILO	RHEUM	RHEUM	SALVIA	SALVI
PSILOCARYA	PSILO2	RHEXIA	RHEXI	SALVINIA	SALVI2
PSILOSTROPHE	PSILO3	RHINANTHUS	RHINA	SAMBUCUS	SAMBU
PSILOTUM	PSILO4	RHIPSALIS	RHIPS	SAMOLUS	SAMOL
PSORALEA	PSORA	RHIZOPHORA	RHIZO	SAMYDA	SAMYD
PSOROTHAMNUS	PSORO	RHODODENDRON	RHODO	SANGUINARIA	SANGU
PSYCHOTRIA	PSYCH	RHODODON	RHODO4	SANGUISORBA	SANGU2
PTELEA	PTELE	RHODOMYRTUS	RHODO2	SANICULA	SANIC
PTERALYXIA	PTERA	RHODOTYPOS	RHODO3	SANIDOPHYLLUM	SANID
PTERIDIUM	PTERI	RHOEO	RHOEO	SANSEVIERIA	SANSE
PTERIS	PTERI2	RHUS	RHUS+	SANTALUM	SANTA
PTEROCARPUS	PTERO	RHYNCHELYTRUM	RHYNC	SANTOLINA	SANTO
PTEROCAULON	PTERO2	RHYNCHOSIA	RHYNC2	SANVITALIA	SANVI
PTEROLEPIS	PTERO5	RHYNCHOSIDA	RHYNC5	SAPINDUS	SAPIN
PTEROSPORA	PTERO3	RHYNCHOSINAPIS	RHYNC4	SAPIUM	SAPIU
PTEROSTEGIA	PTERO4	RHYNCHOSPORA	RHYNC3	SAPONARIA	SAPON
PTERYXIA	PTERY	RIBES	RIBES	SARACHA	SARAC
PTILAGROSTIS	PTILA	RICHARDIA	RICHA	SARCOBATUS	SARCO
PTILIMNIUM	PTILI	RICINUS	RICIN	SARCODES	SARCO2
PUCCINELLIA	PUCCI	RIGIOPAPPUS	RIGIO	SARCOSTEMMA	SARCO4
PUERARIA	PUERA	RIVINA	RIVIN	SARRACENIA	SARRA
PULICARIA	PULIC	ROBINIA	ROBIN	SARTWELLIA	SARTW
PULSATILLA	PULSA	ROCHEFORTIA	ROCHE	SASSAFRAS	SASSA
PUNICA	PUNIC	ROEGNERIA	ROEGN	SATUREJA	SATUR
PURPUSIA	PURPU	ROEMERIA	ROEME	SAURURUS	SAURU
PURSHIA	PURSH	ROLANDRA	ROLAN	SAUSSUREA	SAUSS
PYCNANTHEMUM	PYCNA	ROLLANDIA	ROLLA	SAUVAGESIA	SAUVA
PYCNOTHYMUS	PYCNO	ROLLINIA	ROLLI	SAVIA	SAVIA
PYRACANTHA	PYRAC	ROMANZOFFIA	ROMAN	SAXIFRAGA	SAXIF
PYROLA	PYROL	ROMNEYA	ROMNE	SCABIOSA	SCABI
PYROSTEGIA	PYROS	ROMULEA	ROMUL	SCAEVOLA	SCAEV

GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL
SCANDIX	SCAND	SEQUOIADENDRON	SEQUO2	SPHAEROPHYSA	SPHAE2
SCAPHYGLOTTIS	SCAPH	SERENOA	SEREN	SPHENOCLEA	SPHEN5
SCHAEFFERIA	SCHAE	SERJANIA	SERJA	SPHENOMERIS	SPHEN3
SCHEDONNARDUS	SCHED	SESAMUM	SESAM	SPHENOPHOLIS	SPHEN
SCHEUCHZERIA	SCHEU	SESBANIA	SESBA	SPHENOSCIADIUM	SPHEN2
SCHIEDEA	SCHIE	SESELI	SESEL	SPHENOSTIGMA	SPHEN4
SCHINUS	SCHIN	SESUVIUM	SESUV	SPHINCTOSPERMUM	SPHIN
SCHISANDRA	SCHIS2	SETARIA	SETAR	SPIGELIA	SPIGE
SCHISMUS	SCHIS	SETCREASEA	SETCR	SPILANTHES	SPILA
SCHISTOPHRAGMA	SCHIS3	SEYMERIA	SEYME	SPINACIA	SPINA
SCHIZACHNE	SCHIZ	SHEPHERDIA	SHEPH	SPIRAEA	SPIRA
SCHIZACHYRIUM	SCHIZ4	SHERARDIA	SHERA	SPIRANTHES	SPIRA2
SCHIZAEA	SCHIZ2	SHINNERSIA	SHINN	SPIRODELA	SPIRO
SCHIZANTHUS	SCHIZ7	SHINNERSOSERIS	SHINN2	SPODIOPOGON	SPODI
SCHIZOPHRAGMA	SCHIZ6	SHORTIA	SHORT	SPONDIAS	SPOND
SCHIZOSTACHYUM	SCHIZ5	SIBARA	SIBAR	SPOROBOLUS	SPORO
SCHKUHRIA	SCHKU	SIBBALDIA	SIBBA	SPRAGUEA	SPRAG
SCHLEGELIA	SCHLE	SICYOS	SICYO	STACHYDEOMA	STACH3
SCHLUMBERGERA	SCHLU	SICYOSPERMA	SICYO2	STACHYS	STACH
SCHOENOCAULON	SCHOE	SIDA	SIDA+	STACHYTARPHETA	STACH2
SCHOENOCRAMBE	SCHOE2	SIDALCEA	SIDAL	STAHLIA	STAHL
SCHOENOLIRION	SCHOE3	SIDASTRUM	SIDAS	STANLEYA	STANL
SCHOENUS	SCHOE4	SIDERITIS	SIDER	STAPHYLEA	STAPH
SCHOEPFIA	SCHOE5	SIEGLINGIA	SIEGL	STEGNOSPERMA	STEGN
SCHRADERA	SCHRA2	SIGESBECKIA	SIGES	STEINCHISMA	STEIN
SCHRANKIA	SCHRA	SILENE	SILEN	STELIS	STELI
SCHULTESIA	SCHUL	SILPHIUM	SILPH	STELLARIA	STELL
SCHWALBEA	SCHWA	SILYBUM	SILYB	STEMODIA	STEMO
SCILLA	SCILL	SIMAROUBA	SIMAR	STENANDRIUM	STENA
SCIRPUS	SCIRP	SIMMONDSIA	SIMMO	STENANTHIUM	STENA2
SCLERANTHUS	SCLER	SIMSIA	SIMSI	STENOCARPUS	STENO4
SCLERIA	SCLER2	SINAPIS	SINAP	STENOGONUM	STENO5
SCLEROCACTUS	SCLER10	SIPHONEUGENA	SIPHO2	STENOGYNE	STENO
SCLEROCARPUS	SCLER3	SIPHONOGLOSSA	SIPHO	STENOSIPHON	STENO2
SCLEROCHLOA	SCLER4	SISYMBRIUM	SISYM	STENOTAPHRUM	STENO3
SCLEROLEPIS	SCLER5	SISYRINCHIUM	SISYR	STEPHANOMERIA	STEPH
SCLEROLINON	SCLER9	SITANION	SITAN+	STEVIA	STEVI
SCLEROPOGON	SCLER7	SIUM	SIUM+	STEWARTIA	STEWA
SCLEROSTACHYA	SCLER8	SKOTTSBERGILIANA	SKOTT	STICTOCARDIA	STICT
SCOLIOPUS	SCOLI	SLOANEA	SLOAN	STIGMAPHYLLON	STIGM
SCOLOCHLOA	SCOLO	SMALLANTHUS	SMALL	STILLINGIA	STILL
SCOLOSANTHUS	SCOLO2	SMELOWSKIA	SMELO	STIPA	STIPA
SCOLYMUS	SCOLY	SMILACINA	SMILA	STIPORYZOPSIS	STIPO
SCOPARIA	SCOPA	SMILAX	SMILA2	STIPULICIDA	STIPU
SCOPULOPHILA	SCOPU	SOLANDRA	SOLAN2	STOKESIA	STOKE
SCORPIURUS	SCORP	SOLANUM	SOLAN	STREBLUS	STREB
SCORZONELLA	SCORZ2	SOLEIROLIA	SOLEI	STREPTANTHELLA	STREP
SCORZONERA	SCORZ	SOLIDAGO	SOLID	STREPTANTHUS	STREP2
SCRIBNERIA	SCRIB	SOLIVA	SOLIV	STREPTOPUS	STREP3
SCROPHULARIA	SCROP	SOLLYA	SOLLY	STRIGA	STRIG
SCUTELLARIA	SCUTE	SONCHUS	SONCH	STRONGYLODON	STRON
SCYBALIUM	SCYBA	SOPHORA	SOPHO	STROPHANTHUS	STROP3
SEARSIA	SEARS	SORBARIA	SORBA	STROPHOSTYLES	STROP
SEBASTIANIA	SEBAS2	SORBARONIA	SORBA2	STRUCHIUM	STRUC
SECALE	SECAL	SORBUS	SORBU	STRUMPFIA	STRUM
SECHIUM	SECHI	SORGHASTRUM	SORGH	STYLISMA	STYLI
SECULA	SECUL	SORGHUM	SORGH2	STYLOCLINE	STYLO
SECURIDACA	SECUR	SPARGANIUM	SPARG	STYLODON	STYLO2
SECURINEGA	SECUR2	SPARTINA	SPART	STYLOGYNE	STYLO6
SEDELLA	SEDEL	SPARTIUM	SPART2	STYLOMECON	STYLO5
SEDUM	SEDUM	SPATHIGER	SPATH3	STYLOPHORUM	STYLO3
SEHIMA	SEHIM	SPATHODEA	SPATH	STYLOSANTHES	STYLO4
SELAGINELLA	SELAG	SPATHOGLOTTIS	SPATH2	STYPHELIA	STYPH
SELENIA	SELEN	SPERGULA	SPERG	STYRAX	STYRA
SELINOCARPUS	SELIN	SPERGULARIA	SPERG2	SUAEDA	SUAED
SEMPERVIVUM	SEMPE	SPERMACOCE	SPERM	SUBULARIA	SUBUL
SENECIO	SENEC	SPERMOLEPIS	SPERM2	SUCCISA	SUCCI
SENEGALIA	SENEG	SPHAERALCEA	SPHAE	SUCKLEYA	SUCKL
SEQUOIA	SEQUO	SPHAEROMERIA	SPHAE3	SUKSDORFIA	SUKSD

GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL
SULLIVANTIA	SULLI	THELOCACTUS	THELO	TRIDAX	TRIDA
SURIANA	SURIA	THELYPODIOPSIS	THELY3	TRIDENS	TRIDE
SWALLENIA	SWALL	THELYPODIUM	THELY	TRIENTALIS	TRIEN
SWERTIA	SWERT	THELYPTERIS	THELY2	TRIFOLIUM	TRIFO
SWIETENIA	SWIET	THEMEDA	THEME	TRIGLOCHIN	TRIGL
SYMPHORICARPOS	SYMPH	THEOBROMA	THEOB	TRIGONELLA	TRIGO
SYMPHYTUM	SYMPH2	THERMOPSIS	THERM	TRILISA	TRILI
SYMPLOCARPUS	SYMPL	THESIUM	THESI	TRILLIUM	TRILL
SYMPLOCOS	SYMPL2	THESPESIA	THESP	TRIMEZIA	TRIME
SYNANDRA	SYNAN	THEVETIA	THEVE	TRIODANIS	TRIOD
SYNEDRELLA	SYNED	THISMIA	THISM	TRIOSTEUM	TRIOS
SYNEDRELLOPSIS	SYNED2	THLADIANTHA	THLAD	TRIPHASIA	TRIPH2
SYNELCOSCIADIUM	SYNEL	THLASPI	THLAS	TRIPHORA	TRIPH
SYNGONANTHUS	SYNGO2	THOUINIA	THOUI	TRIPLASIS	TRIPL2
SYNGONIUM	SYNGO	THRINAX	THRIN	TRIPOGANDRA	TRIPO2
SYNTHLIPSIS	SYNTH	THUJA	THUJA	TRIPOGON	TRIPO
SYNTHYRIS	SYNTH2	THUNBERGIA	THUNB	TRIPSACUM	TRIPS
SYNTRICHOPAPPUS	SYNTR	THYMELAEA	THYME	TRIPTEROCALYX	TRIPT
SYRINGA	SYRIN	THYMUS	THYMU	TRIRAPHIS	TRIRA
SYZYGIUM	SYZYG	THYSANOCARPUS	THYSA	TRISETUM	TRISE
TABEBUIA	TABEB	THYSANOLAENA	THYSA2	TRITELEIA	TRITE
TABERNAEMONTANA	TABER	TIARELLA	TIARE	TRITELEIOPSIS	TRITE2
TACCA	TACCA	TIBOUCHINA	TIBOU	TRITICUM	TRITI
TAENIATHERUM	TAENI2	TICANTO	TICAN	TRIUMFETTA	TRIUM
TAENIDIA	TAENI	TIDESTROMIA	TIDES	TRIXIS	TRIXI
TAGETES	TAGET	TILIA	TILIA	TROLLIUS	TROLL
TALINOPSIS	TALIN	TILINGIA	TILIN	TROPAEOLUM	TROPA
TALINUM	TALIN2	TILLANDSIA	TILLA2	TROPHIS	TROPH
TALISIA	TALIS	TINANTIA	TINAN	TROPIDIA	TROPI2
TAMARINDUS	TAMAR	TIPULARIA	TIPUL	TROPIDOCARPUM	TROPI
TAMARIX	TAMAR2	TITHONIA	TITHO	TSUGA	TSUGA
TAMAULIPA	TAMAU	TOFIELDIA	TOFIE	TULIPA	TULIP
TANACETUM	TANAC	TOLMIEA	TOLMI	TUMAMOCA	TUMAM
TARAXACUM	TARAX	TOLPIS	TOLPI	TURBINA	TURBI
TAUSCHIA	TAUSC	TOMANTHERA	TOMAN	TURGENIA	TURGE
TAXODIUM	TAXOD	TONELLA	TONEL	TURNERA	TURNE
TAXUS	TAXUS	TOONA	TOONA	TURPINIA	TURPI
TECOMA	TECOM	TORILIS	TORIL	TURRICULA	TURRI
TECTARIA	TECTA	TORRALBASIA	TORRA	TUSSILAGO	TUSSI
TECTONA	TECTO	TORREYA	TORRE	TYNANTHUS	TYNAN
TEESDALIA	TEESD	TOUCHARDIA	TOUCH	TYPHA	TYPHA
TELESONIX	TELES	TOURNEFORTIA	TOURN	ULEX	ULEX+
TELIOSTACHYA	TELIO	TOWNSENDIA	TOWNS	ULMUS	ULMUS
TELLIMA	TELLI	TOXICODENDRON	TOXIC	UMBELLULARIA	UMBEL
TEPHROSIA	TEPHR	TRACHELOSPERMUM	TRACH	UNCINIA	UNCIN
TERAMNUS	TERAM	TRACHYPOGON	TRACH2	UNGNADIA	UNGNA
TERMINALIA	TERMI	TRACYINA	TRACY	UNIOLA	UNIOL
TERNSTROEMIA	TERNS	TRADESCANTIA	TRADE	URECHITES	URECH
TETRACLEA	TETRA	TRAGIA	TRAGI	URENA	URENA
TETRACOCCUS	TETRA2	TRAGOPOGON	TRAGO	URERA	URERA
TETRADYMIA	TETRA3	TRAGUS	TRAGU	UROCHLOA	UROCH
TETRAGASTRIS	TETRA4	TRAPA	TRAPA	UROSPERMUM	UROSP
TETRAGONIA	TETRA9	TRAUTVETTERIA	TRAUT	URTICA	URTIC
TETRAGONOTHECA	TETRA5	TREMA	TREMA	URVILLEA	URVIL
TETRAMERIUM	TETRA6	TREMATOLOBELIA	TREMA2	UTRICULARIA	UTRIC
TETRAMICRA	TETRA8	TREPOCARPUS	TREPO	UVULARIA	UVULA
TETRAMOLOPIUM	TETRA12	TRIADENUM	TRIAD	VACCARIA	VACCA
TETRANEURIS	TETRA13	TRIANTHEMA	TRIAN	VACCINIUM	VACCI
TETRAPLASANDRA	TETRA11	TRIBULUS	TRIBU	VAHLODEA	VAHLO
TETRAPTERIS	TETRA10	TRICARDIA	TRICA	VALERIANA	VALER
TETRAZYGIA	TETRA7	TRICHILIA	TRICH2	VALERIANELLA	VALER2
TEUCRIUM	TEUCR	TRICHOCORONIS	TRICH4	VALLESIA	VALLE
THALASSIA	THALA	TRICHOMANES	TRICH5	VALLISNERIA	VALLI
THALIA	THALI	TRICHONEURA	TRICH6	VANCLEVEA	VANCL
THALICTRUM	THALI2	TRICHOPHORUM	TRICH7	VANCOUVERIA	VANCO
THAMNOSMA	THAMN	TRICHOPTERIS	TRICH10	VANILLA	VANIL
THASPIUM	THASP	TRICHOPTILIUM	TRICH8	VARILLA	VARIL
THELESPERMA	THELE	TRICHOSTEMA	TRICH9	VASEYOCHLOA	VASEY
THELLUNGIELLA	THELL	TRICHOSTIGMA	TRICH11	VAUQUELINIA	VAUQU

GENUS NAME	GENUS SYMBOL	GENUS NAME	GENUS SYMBOL
VELEZIA	VELEZ	YUCCA	YUCCA
VENEGASIA	VENEG	ZALUZANIA	ZALUZ
VENIDIUM	VENID	ZAMIA	ZAMIA
VENTENATA	VENTE	ZANNICHELLIA	ZANNI
VERATRUM	VERAT	ZANTEDESCHIA	ZANTE
VERBASCUM	VERBA	ZANTHOXYLUM	ZANTH
VERBENA	VERBE	ZEA	ZEA++
VERBESINA	VERBE2	ZEBRINA	ZEBRI
VERNONIA	VERNO	ZENOBIA	ZENOB
VERONICA	VERON	ZEPHYRANTHES	ZEPHY
VERONICASTRUM	VERON2	ZEUXINE	ZEUXI
VETIVERIA	VETIV	ZEXMENIA	ZEXME
VIBURNUM	VIBUR	ZIGADENUS	ZIGAD
VICIA	VICIA	ZINGIBER	ZINGI
VICOA	VICOA	ZINNIA	ZINNI
VIGNA	VIGNA	ZIZANIA	ZIZAN
VIGUIERA	VIGUI	ZIZANIOPSIS	ZIZAN2
VILLADIA	VILLA	ZIZIA	ZIZIA
VINCA	VINCA	ZIZIPHUS	ZIZIP
VIOLA	VIOLA	ZORNIA	ZORNI
VISCUM	VISCU	ZOSTERA	ZOSTE
VITEX	VITEX	ZOSTERELLA	ZOSTE2
VITIS	VITIS	ZOYSIA	ZOYSI
VITTARIA	VITTA	ZUCKIA	ZUCKI
VRIESEA	VRIES	ZYGOPHYLLUM	ZYGOP
VULPIA	VULPI		
WAHLENBERGIA	WAHLE		
WALDSTEINIA	WALDS		
WALLENIA	WALLE		
WALTHERIA	WALTH		
WAREA	WAREA		
WASHINGTONIA	WASHI		
WATSONIA	WATSO		
WEBSTERIA	WEBST		
WEDELIA	WEDEL		
WEINMANNIA	WEINM		
WHIPPLEA	WHIPP		
WHITNEYA	WHITN		
WIGANDIA	WIGAN		
WIKSTROEMIA	WIKST		
WILHELMSIA	WILHE		
WILKESIA	WILKE		
WILLKOMMIA	WILLK		
WISLIZENIA	WISLI		
WISSADULA	WISSA		
WISTERIA	WISTE		
WOLFFIA	WOLFF		
WOLFFIELLA	WOLFF2		
WOODSIA	WOODS		
WOODWARDIA	WOODW		
WULLSCHLAEGELIA	WULLS		
WYETHIA	WYETH		
XANTHISMA	XANTH		
XANTHIUM	XANTH2		
XANTHOCEPHALUM	XANTH6		
XANTHORHIZA	XANTH5		
XANTHOSOMA	XANTH4		
XEROPHYLLUM	XEROP		
XIMENIA	XIMEN		
XIPHIDIUM	XIPHI		
XYLOBIUM	XYLOB		
XYLOCOCCUS	XYLOC		
XYLOPHYLLA	XYLOP		
XYLORHIZA	XYLOR		
XYLOSMA	XYLOS		
XYRIS	XYRIS		
YABEA	YABEA		
YEATESIA	YEATE		
YOUNGIA	YOUNG		

APPENDIX 2: REGIONAL DISTRIBUTION MAP

SOURCE: "The National List of Scientific Plant Names" 1982.

As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural and cultural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people. The department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and citizen responsibility for the public lands and promoting citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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