## Index to general usage topics

| | | |
|---|---|---|
| ✚ | The notes editor | Index to topics about the notes editor. |
| ✚ | Focus dependent commands | Index to topics about the current focus. |
| ✚ | Suggested data collection methods | Index to suggested data collection methods. |

*Compleat Botanica* - The notes editor

## Index to the notes editor topics

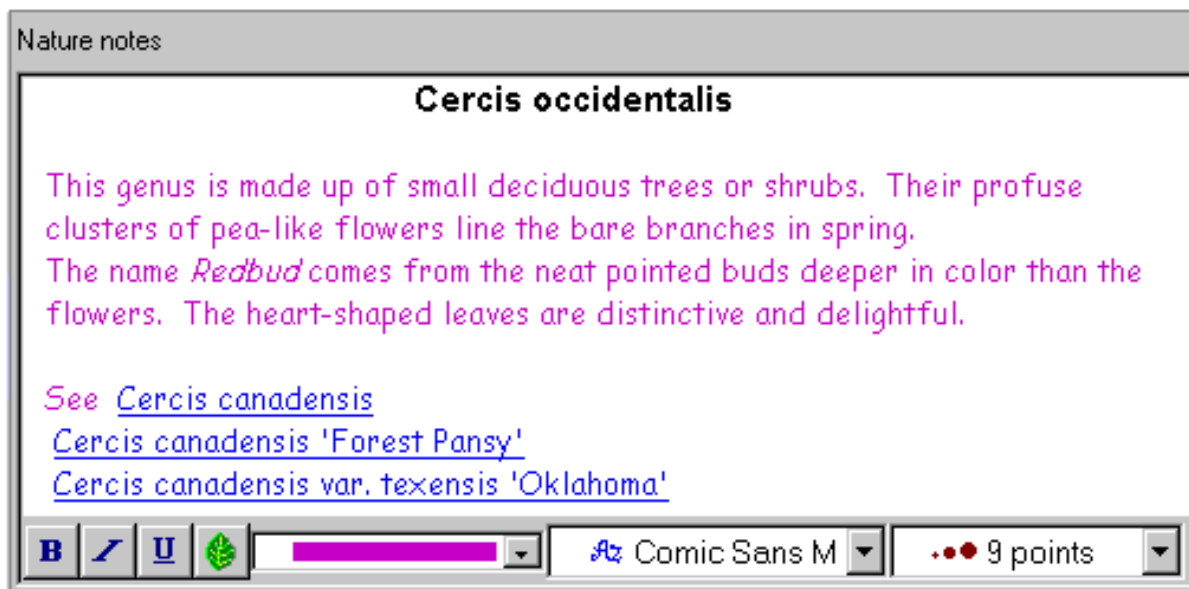| | | |
|---|---|---|
| ℹ | **What's possible with the notes area** | The notes areas found on the Acquisition View and the Calendar View can contain general purpose descriptive text that just doesn't fit into any of the standard categories. |
| ℹ | **Adding cross references to specimen in the notes area** | Sometimes when you're making a note about a specimen, you may want to mention another specimen in your collection. |
| ℹ | **Limitations on the note fields** | The three notes fields (acquisition, nature, checklist) are modestly limited in the amount of text they can store. |

*Compleat Botanica* - What's possible with the notes area

The notes areas found on the Acquisition View and the Calendar View can contain general purpose descriptive text that just doesn't fit into any of the standard categories.  These notes can be enhanced with word processing-like features for selecting fonts and styles.  In addition, you can insert hyperlinks from one specimen record to another -- see the document on Adding cross references to specimen in the notes area.

```
Nature notes
┌─────────────────────────────────────────────────────────┐
│                   Cercis occidentalis                    │
│                                                          │
│  This genus is made up of small deciduous trees or shrubs.  Their profuse │
│  clusters of pea-like flowers line the bare branches in spring. │
│  The name Redbud comes from the neat pointed buds deeper in color than the │
│  flowers.  The heart-shaped leaves are distinctive and delightful. │
│                                                          │
│  See  Cercis canadensis                                  │
│       Cercis canadensis 'Forest Pansy'                   │
│       Cercis canadensis var. texensis 'Oklahoma'         │
└─────────────────────────────────────────────────────────┘
[ B ] [ I ] [ U ] [🍃] [ ███████ ▼ ] [ Az Comic Sans M ▼ ] [ •●● 9 points   ▼ ]
```

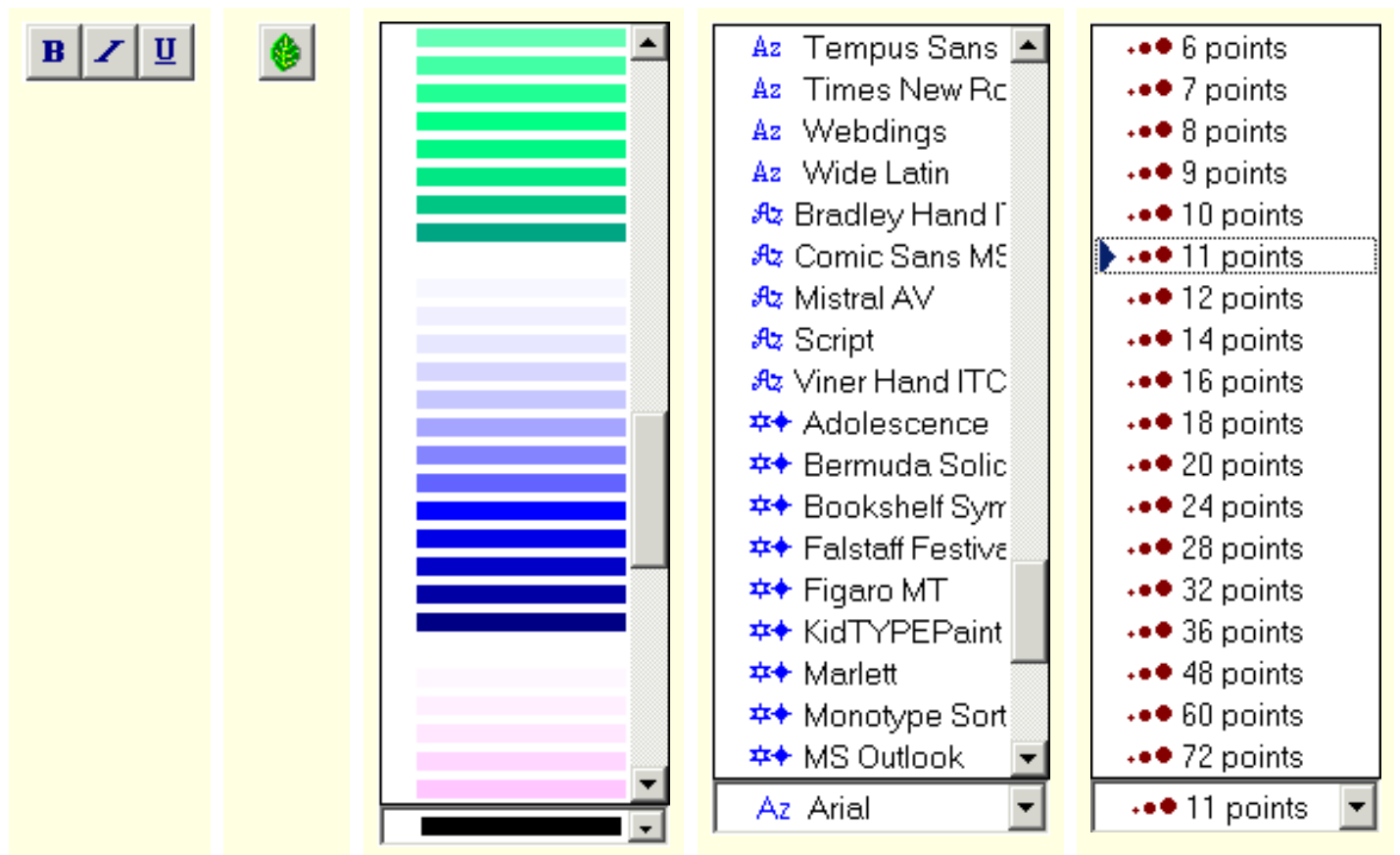| | | | | |
|---|---|---|---|---|
| Use the **font style buttons** to change the selected text to bold, italics, and underlined | Use the **green leafed button** to add a hyperlink to another specimen | Use the **font color selector** to change the selected text color | Use the **font face selector** to change the selected text font | Use the **font size selector** to change the selected text size |

| | | | | |
|---|---|---|---|---|
| **B** *I* <u>U</u> | 🍃 | | | |

Font list:
- Az  Tempus Sans
- Az  Times New Ro
- Az  Webdings
- Az  Wide Latin
- Az  Bradley Hand I
- Az  Comic Sans MS
- Az  Mistral AV
- Az  Script
- Az  Viner Hand ITC
- ✿✦ Adolescence
- ✿✦ Bermuda Solic
- ✿✦ Bookshelf Sym
- ✿✦ Falstaff Festiva
- ✿✦ Figaro MT
- ✿✦ KidTYPEPaint
- ✿✦ Marlett
- ✿✦ Monotype Sort
- ✿✦ MS Outlook

Az  Arial

Points list:
- 6 points
- 7 points
- 8 points
- 9 points
- 10 points
- 11 points
- 12 points
- 14 points
- 16 points
- 18 points
- 20 points
- 24 points
- 28 points
- 32 points
- 36 points
- 48 points
- 60 points
- 72 points

11 points

The font formatting applied to your notes is displayed only in the special rich-text note fields.  No formatting is displayed in the Specimen List or on any printed report.

*Compleat Botanica* - Adding cross references to specimen in the notes area

Sometimes when you're making a note about a specimen, you may want to mention another specimen in your collection. For example, one specimen may be propagated from another specimen, or one specimen may have features which are compared to another specimen.

Follow this simple two-step process to create a hyperlink inside your notes area.

Pressing the green-leaf **Insert specimen link** button displays this list.

Acquisition notes

A. 'Ashford Red' is erect to spreading, evergreen shrub. Also obtained

**B** _/_ U ● | ▬▬▬ ▼ | Az System ▼ | •●10 pc ▼
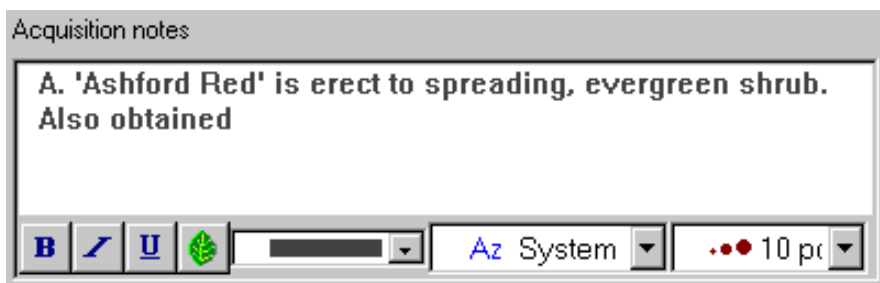
Pressing the **Add selections** button inserts a hypertext link into the notes area.

**Select specimen** ✕

⊘ Features ▼

| | Life cycle | Stature |
|---|---|---|
| **Abutilon 'Ashford Red'** | 🐞 Perennial | ⊤ Shrub |
| ▶ **Abutilon 'Bella mix'** | 🐞 Perennial | ⊤ Shrub |
| **Acer macrophyllum** | 🐞 Perennial | ⊤ Shrub |

☀ Add selections | ⏻ Close

Acquisition notes

A. 'Ashford Red' is erect to spreading, evergreen shrub. Also obtained **Abutilon 'Bella mix'** at the same time.

B / U ⬢ [▬▬▬ ▼] [Az System ▼] [•●◆ 10 po ▼]
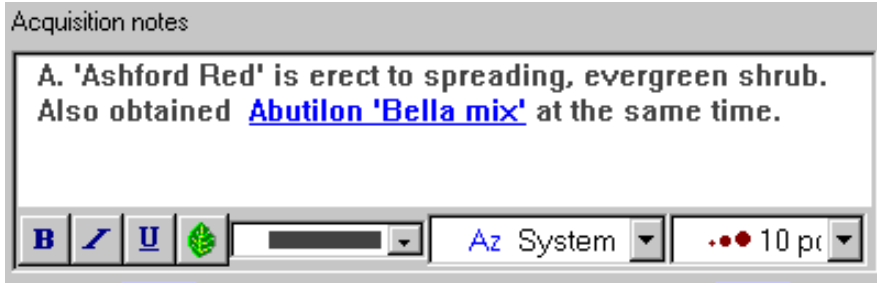
Now A. 'Ashford Red' is associated with A. 'Bella mix' and can be displayed by clicking on the blue hypertext link.

Note that the hypertext linking feature is not available on computers running Windows 98.  Only computers with version 2.0 of the RichEdit control can use this feature.

## *Compleat Botanica* - Limitations on the note fields

The five word processing-like document areas (garden, herbal medicine, horticulture, herbarium and checklist) are modestly limited in the amount of text they can store. This limit is approximately 8,000 characters. The exact size is determined by the amount of formatting applied to the notes.  The total size of all text and formatting in a document must not exceed 8192 characters. If this limit is exceeded you may see the following message in the notes field:

Nature notes

**Error: could not read text**

**B** **I** **U**    ▼    Az System ▼    ·•● 10 point ▼

# *Compleat Botanica* - Focus dependent commands
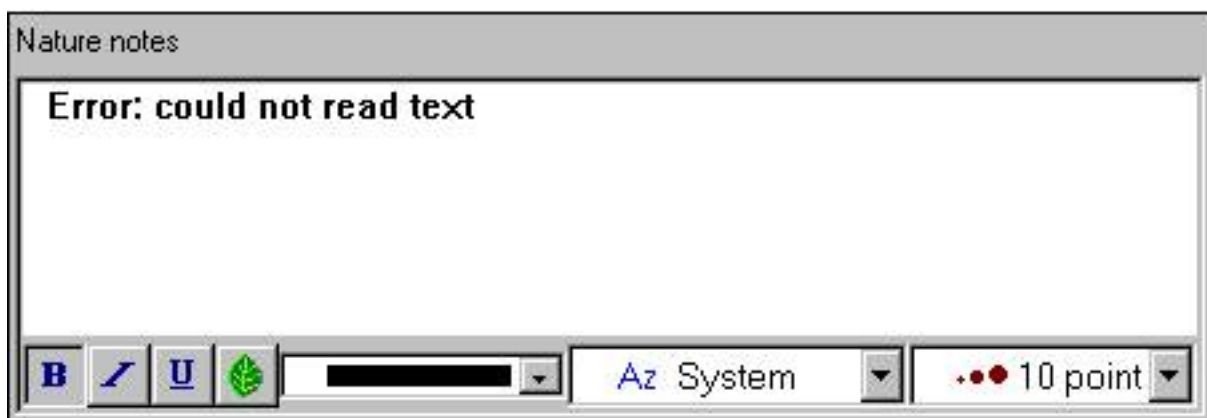
## Index to topics about the current focus

| | |
|---|---|
| **What is the significance of the fancy borders?** | Each view within The Compleat Botanica is framed with a fancy border. This border is more than just decorative. The view that is highlighted in blue has the "current focus"; the view that is shaded gray does not. |
| **Dynamic file menu commands** | File menu items that change depending upon the current focus. |
| **Dynamic edit menu commands** | Edit menu items that change depending upon the current focus. |

# Compleat Botanica - What is the significance of the fancy borders?

Each view within The Compleat Botanica is framed with a fancy border.  This border is more than just decorative.  The view that is highlighted in blue has the "current focus"; the view that is shaded gray does not.

This view has the focus . . .            This view does not . . .
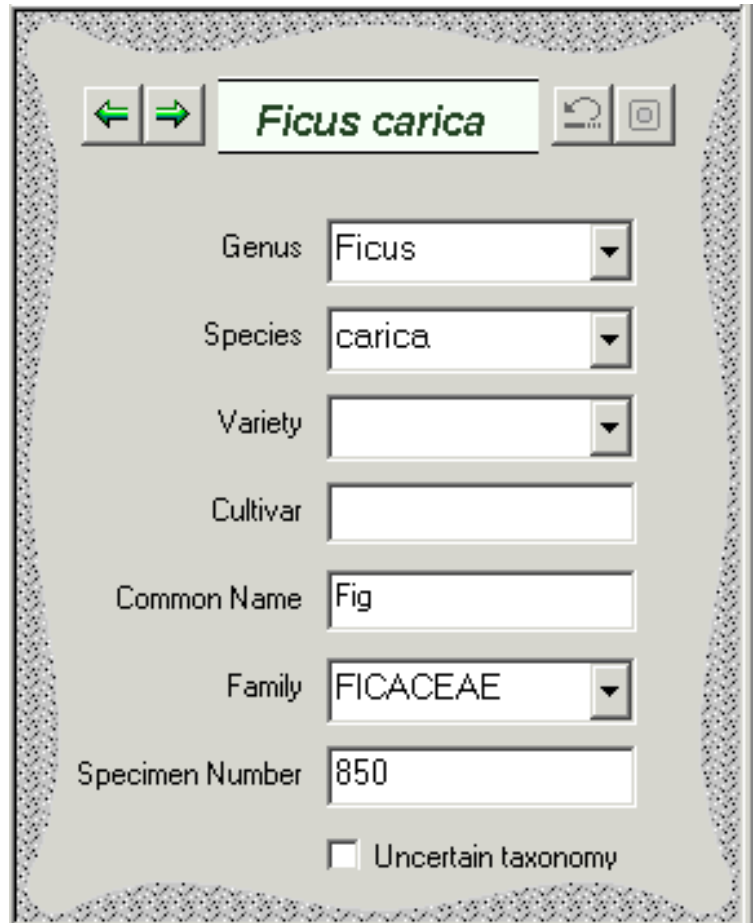
The view that has the current focus is the one that becomes the target of all Cut, Copy, Paste, and Find commands.  Setting the focus to either the List view or the Detail view is automatic whenever you click within that window.  To use your keyboard to switch focus, press down and hold the <Ctrl> key together with the left or right arrows.

## *Compleat Botanica* - Dynamic file menu commands

Some of the file menu items perform different tasks depending on which view currently has the focus. This is true for the import, export and publish commands as well as all three print commands: print document, print report, and print tags.

The database commands are not affected by the current focus.

### Import commands

| Current view | Effect |
|---|---|
| Pathfinder | N/A |
| Specimen | Imports specimen |
| Filter | Imports filters |
| Vernacular | Imports common names |
| Checklist | Imports botanical names |
| Categories | Imports categories |

## Export commands
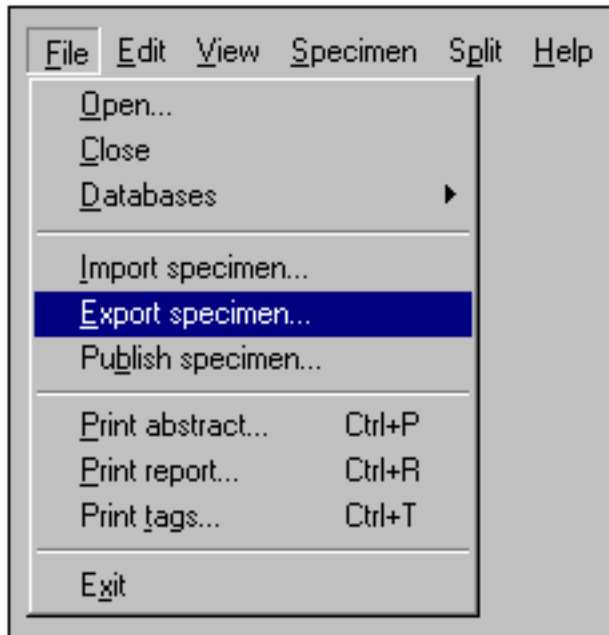


| Current view | Effect |
| --- | --- |
| Pathfinder | N/A |
| Specimen | Exports specimen |
| Filter | Exports filters |
| Vernacular | Exports common names |
| Checklist | Exports botanical names |
| Categories | Exports categories |

## Publish command
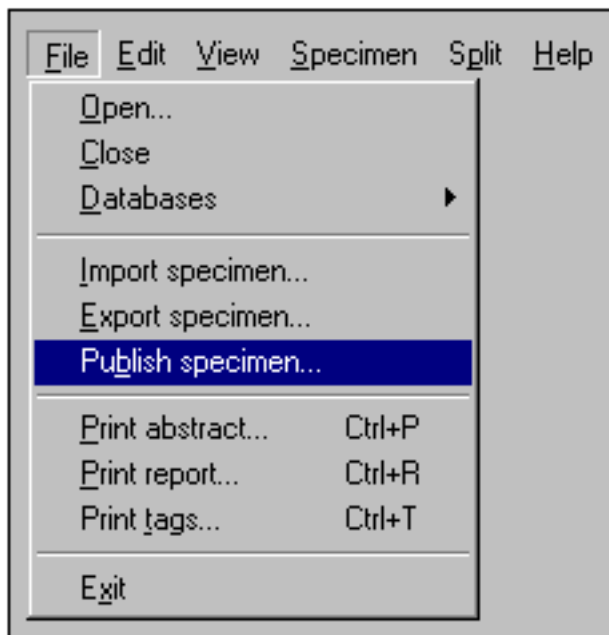


| Current view | Effect |
| --- | --- |
| Pathfinder | N/A |
| Specimen | Publishes specimen |
| Filter | N/A |
| Vernacular | N/A |
| Checklist | N/A |
| Categories | N/A |

## Print document commands
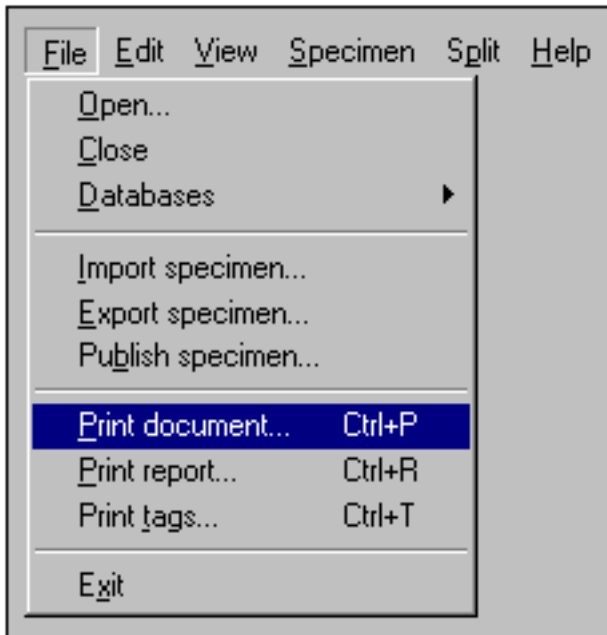


| Current view | Effect |
|---|---|
| Pathfinder | Prints the current Pathfinder document |
| Specimen abstract view | Prints the current abstract |
| Specimen gateway view | Prints the current Gateway document |
| All other Specimen views | N/A |
| Filter | N/A |
| Vernacular | N/A |
| Checklist | N/A |
| Categories | N/A |

## Print report commands

| Current view | Effect |
|---|---|
| Pathfinder | N/A |
| Specimen | Prints a report based on the current filter |
| Filter | N/A |

| | |
|---|---|
| Vernacular | Prints a checklist report based on the currently selected taxonomic entry |
| Checklist | N/A |
| Categories | N/A |
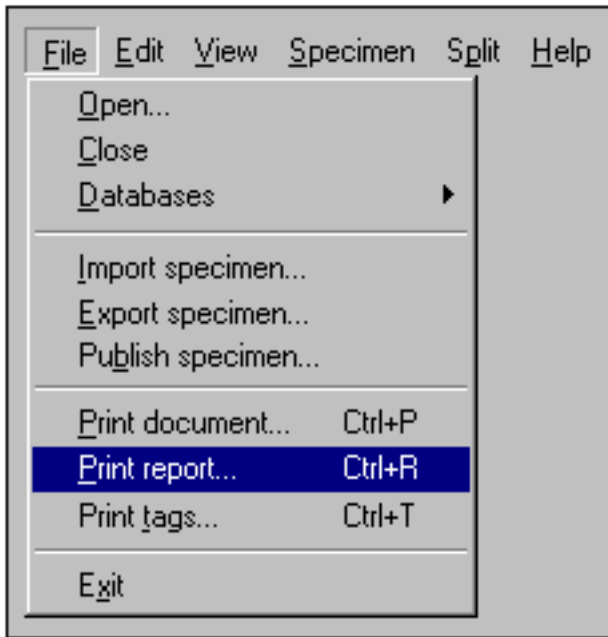
## Print labels command
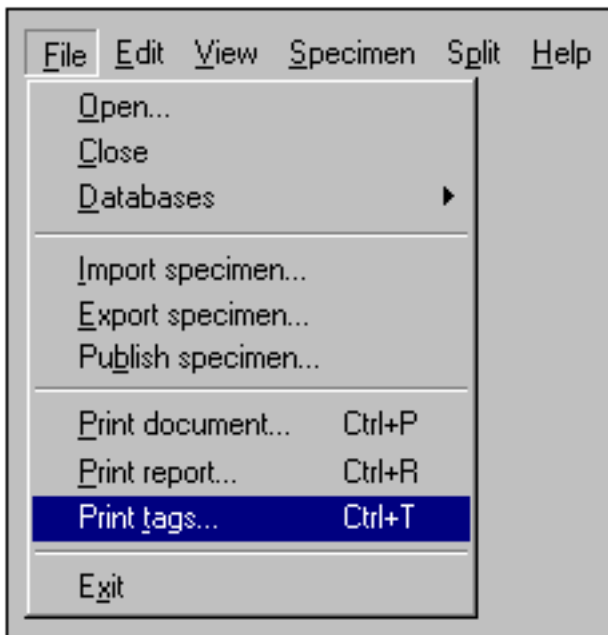
| Current view | Effect |
|---|---|
| Pathfinder | N/A |
| Specimen | Prints labels for specimen in your collection |
| Filter | N/A |
| Vernacular | N/A |
| Checklist | N/A |
| Categories | N/A |

## *Compleat Botanica* - **Dynamic edit menu commands**

Some of the edit menu items perform different tasks depending on the current view. In particular you should note that the clipboard cut/ copy/paste commands and the find command operate in this chameleon-like manner.

### Cut command
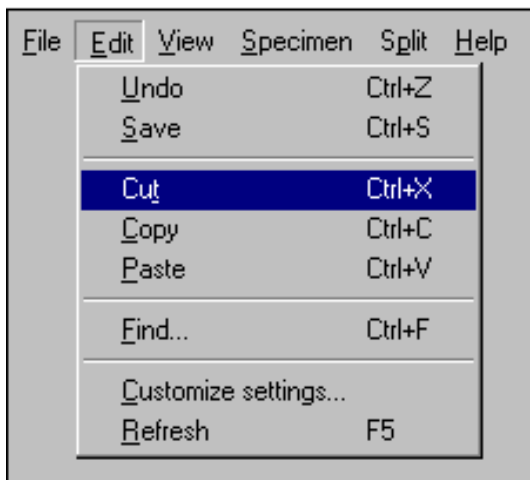
| Current view | Left-hand side List view | Right-hand side Detail view |
|---|---|---|
| Pathfinder | N/A | N/A |
| Specimen | Deletes the selected specimen record(s) | Deletes the selected text of the item with the focus |
| Filter | Deletes the selected filter | Deletes the selected text of the item with the focus |
| Vernacular | Deletes the selected common name(s) | Deletes the selected text of the item with the focus |
| Checklist | Deletes the selected botanical name and all names lower in rank order | Deletes the selected text of the item with the focus |
| Category | Deletes the selected custom category | Deletes the selected text of the item with the focus |
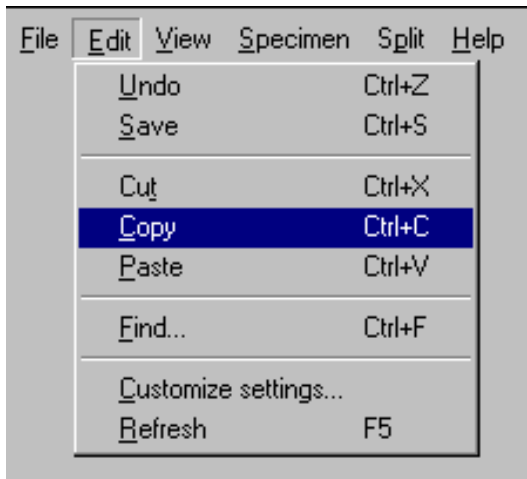
File  Edit  View  Specimen  Split  Help

Undo                Ctrl+Z
Save                Ctrl+S

Cut                 Ctrl+X
Copy                Ctrl+C
Paste               Ctrl+V

Find...             Ctrl+F

Customize settings...
Refresh             F5

## Copy command

| Current view | Left-hand side List view | Right-hand side Detail view |
|---|---|---|
| Pathfinder | N/A | N/A |
| Specimen | Copies the selected specimen record(s) to the clipboard | Copies the selected text of the item with the focus |
| Filter | Copies the selected filter to the clipboard | Copies the selected text of the item with the focus |
| Vernacular | Copies the selected common name(s) to the clipboard | Copies the selected text of the item with the focus |
| Checklist | Copies the selected botanical name and all names down **two ranks lower in order** to the clipboard | Copies the selected text of the item with the focus |
| Category | Copies the selected custom category to the clipboard, or if it is a high-level item copies all subordinate categories | Copies the selected text of the item with the focus |

## Paste command

| Current view | Left-hand side List view | Right-hand side Detail view |
|---|---|---|
| Pathfinder | N/A | N/A |
| Specimen | Pastes specimen records from the clipboard | Pastes the current clipboard text into the item with the focus |
| Filter | Pastes filters from the clipboard | Pastes the current clipboard text into the item with the focus |

| | | |
|---|---|---|
| Vernacular | Pastes common names from the clipboard | Pastes the current clipboard text into the item with the focus |
| Checklist | Pastes a hierarchy of botanical names from the clipboard | Pastes the current clipboard text into the item with the focus |
| Category | Pastes a single custom category from the clipboard, or if available pastes a hierarchy of subordinate categories | Pastes the current clipboard text into the item with the focus |
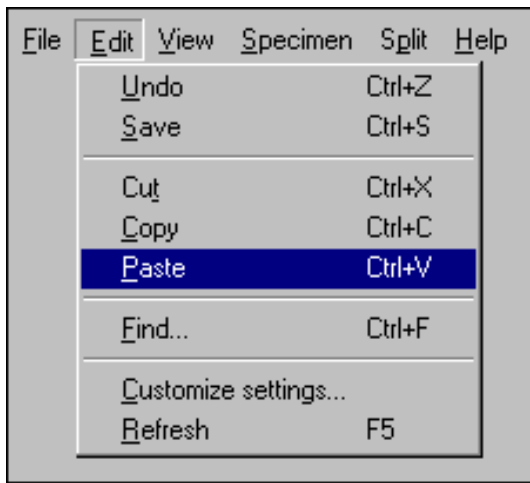
## Find command
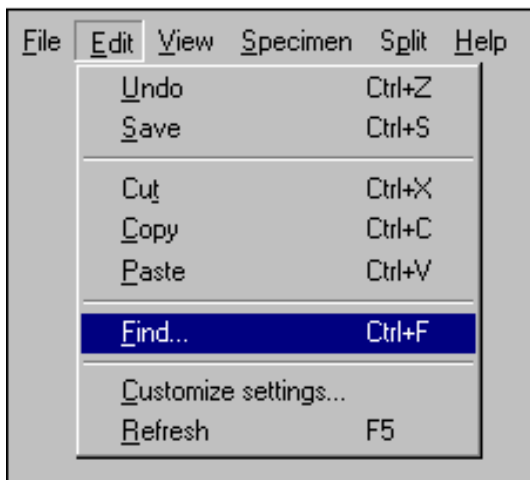


| Current view | Effect |
|---|---|
| Pathfinder | N/A |
| Specimen | Searches all columns of the current specimen list ( i.e. the current filter) for a specified text value |
| Filter | N/A |
| Vernacular | N/A |
| Checklist | Searches all ranks of the taxonomic checklist for a botanical name similar to the specified text value |
| Category | N/A |

Note that the clipboard commands (cut/copy/paste) use the XML language standard for all operations involving the left-hand list view.

*Compleat Botanica* - Suggested data collection methods

## Index to suggested data collection methods

| | |
|---|---|
| **Choosing which data to collect** | Each of us is interested in different things, so it's our choice when it comes to what data to collect and what to ignore. |

# *Compleat Botanica* - Choosing which data to collect

Each of us is interested in different things, so it's our choice when it comes to what data to collect and what to ignore. The Compleat Botanica has many different suggested categories of data, but filling in everything is not realistic for any of us.

As a starting point though, all of us need a common way to identify what we have. You'll want to carefully identify the genus and species in the Identification View. The botanical spell-checker will help you with this. There is no minimum set of fields that must be filled in. As your interests expand you can change which fields you use.

Here are some ideas for which categories to begin with:

## Professional groups

**Arborist:** Record tree forms, life spans, fertilizer requirements, and best practices.

**Conservation:** Develop lists of native, endemic, and rare plants in a conservation area for informed management decisions.

**Plant society:** Develop regional flora to record exactly what can be found in the natural landscape -- from natives to exotics, from endemics to invasives.

**Restoration:** Record lists of suitable species for hillside erosion control projects, wetland edge projects, highway beautification projects, and the like.

**Silviculturist:** Record species data for optimal spacing, life span, and yield.

**Wetland management:** Develop checklists using the wetland indicator and wetland classification fields.

## Botanical sciences

**Botanist:** Record descriptive keys for underground parts, wood, bark, leaves, inflorescences, fruits and more.

**Ecology:** Record symbiotic relationships, key indicator species, and plant communities for an area of study.

**Ethnobotany:** Record historical plant uses and plant lore for indigenous people.

**Herbarium:** Record sheet number, collector's name, collection location, collection date, and collection number for

herbarium specimen.

**Horticulture:** Record best conditions for optimal growth.  Record propagation protocols, seed & pollen parents, and derivation methodologies.

**Taxonomist:** Organize supra-generic names based on your own research criteria.  Cross check data on publication and author citations. Record notes on original names and synonyms.

## 🌿 Home economics

**Cooking:** Record preparation methods and parts used for both common and unusual fruits and vegetables, herbs and spices, and non-traditional food stuffs.

**Dietician:** Record and organize nutritional data such as proteins & fatty acids, vitamins & minerals, and trace elements for fruits, vegetables, leafy greens, grains and nuts.

**Florist:** Develop lists of flowers available by season and by best uses such as dried arrangements, floral bouquets, and so forth.

## 🌿 Gardening

**Arboretum & Botanical Gardens:** Create lists of plants in bloom for easy reference by your docents and visitors.

**Flower gardening:** Investigate flowering times, colors, and forms.  Develop plans using height and spread.  Compare climate suitability with USDA zones, water & sunshine requirements, or soil pH & texture.

**Garden club:** Organize club sales, member lists and exchanges, capture anecdotal information, print tags and data sheets.

**Landscape architecture:** Record lists of decorative plants by stature, suitability to location, compatibility to climate, price, availability, etc.

**Nursery:** Create placards to prominently feature plants. Develop lists of plants in bloom on a season by season basis. Use price codes or special prices fields for each record.

**Vegetable gardening:**  Record best practices for your neighborhood, keep track of seed collections, develop year-over-year harvest data.

## 🌿 Specialties

**Herbalist:** Record traditional medicinal remedies, parts used, therapeutic actions, precautions, and poisonous indications.

**Dye maker:** Record the dyeing properties of plants including possible colors achieved and plant parts used.

**Perfumer:** Record fragrance descriptions, fragrance intensity, fragrance category, and plant parts used.

**Photographer:** Capture plant pictures and organize your photo album with proof sheets, zoom and pan, annotated picture printouts, and all of the sorting and categorizing tools of the software.

# 🌿 Agriculture

**Agricultural Extensions:** Record common pests and diseases, best cultivation practices, and probable yields.

**Pomology:** Record cultivation, pollination and propagation details and relate these details to yields, flavor & texture, or fruit & nut quality.

*Compleat Botanica* - Special keyboard and mouse instructions

## Index to keyboard/mouse topics

| | | |
|---|---|---|
| ℹ️ | What's going on with the auto-save button? | The auto-save button is located in the upper right corner of The Compleat Botanica. |
| ℹ️ | Using the height and spread manipulator | The height and spread of a specimen is displayed using an intuitive control that can be used to indicate both single values and value ranges. |
| ℹ️ | Entering date ranges for bloom, harvest, hay fever and other interest | The items for seasonal interests are shown in a date-range control. This date-range control can be manipulated using the "mouse-drag" operation. |
| ℹ️ | Keyboard shortcuts | Sometimes using the mouse to navigate from one place to another is distracting. If you're a touch-typist, you'll want to learn the keyboard shortcuts that can help you get from one part of The Compleat Botanica to another. |

# *Compleat Botanica* - What's going on with the auto-save button?

The auto-save button is located in the upper right corner of The Compleat Botanica.
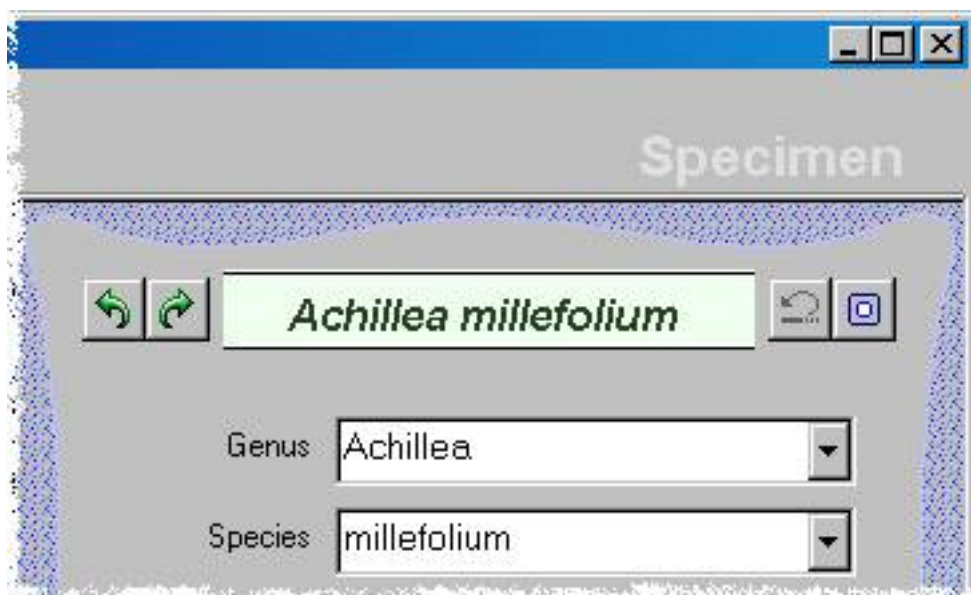


The auto-save button

Whenever any change is made to a specimen record, this button momentarily lights up. This is an indicator to you that you've made a change to the record. If you want to force these changes to be saved to the database immediately, just press the **auto-save** button. Normally however this explicit operation is not necessary because your changes are automatically saved to the database whenever you navigate to a new view.

A dimmed button is an indicator that everything has been saved.

This indicator status works the same way for the Filters, Checklist, and Category views as well.

## *Compleat Botanica* - Using the height and spread manipulator

The height and spread of a specimen is displayed using an intuitive control that can be used to indicate both single values and value ranges.

To indicate single values for height or spread, simply click on the rule at the appropriate place.
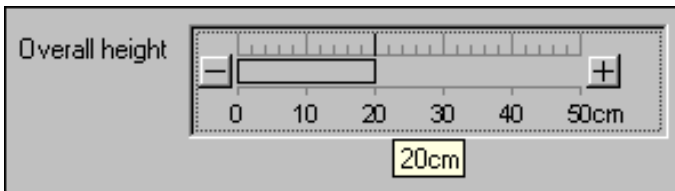


Use the "-" buttons to decrease the rule's scale.
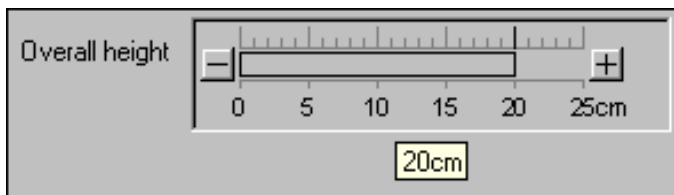
Use the "+" buttons to increase the rule's scale.
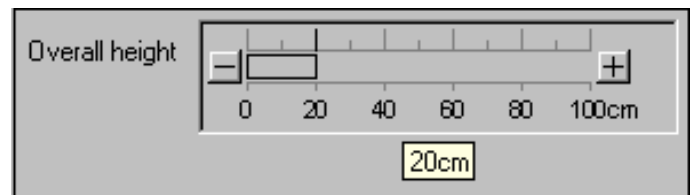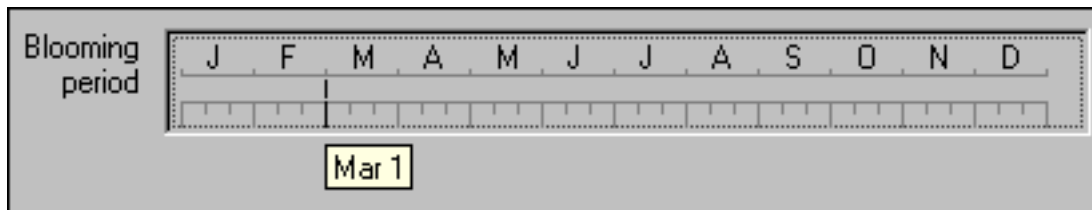




To indicate a range of values use the "mouse-drag" operation like this: position the mouse over the lower value and press down on the mouse button, then drag the mouse to the right until the ending value of the range is reached, then release the mouse button.
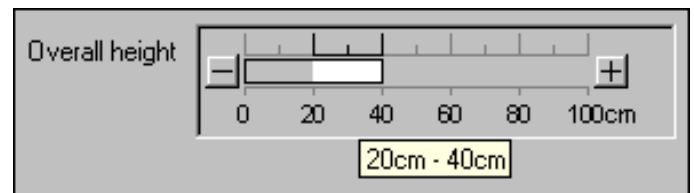
## Compleat Botanica - Entering date ranges for bloom, harvest, hay fever and other interest

The items for seasonal interests are shown in a date-range control. This date-range control can be manipulated using the "mouse-drag" operation. Position the mouse over the starting date and press down; drag the mouse to the right; then release the mouse button when you've reached the ending date.
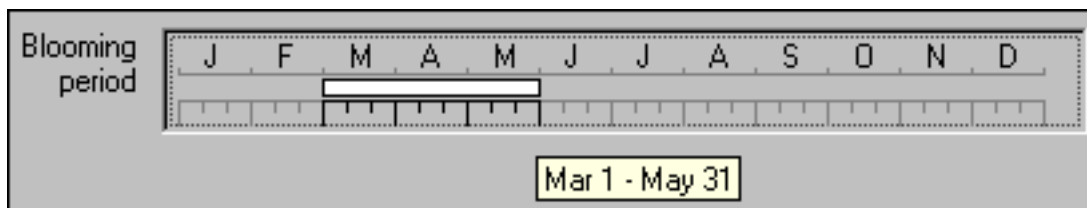
Blooming period

J  F  M  A  M  J  J  A  S  O  N  D
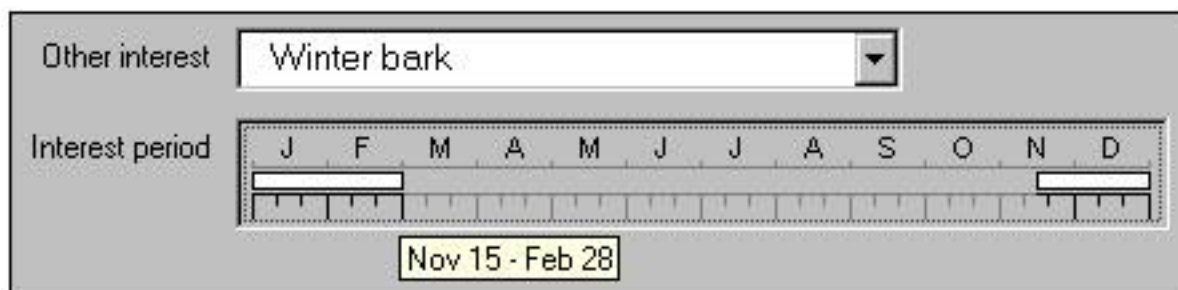
Mar 1

Blooming period

J  F  M  A  M  J  J  A  S  O  N  D

Mar 1 - May 31

To specify a date-range that spans the end of the year, simply drag the mouse left instead of right.

Other interest    Winter bark

Interest period    J  F  M  A  M  J  J  A  S  O  N  D

Nov 15 - Feb 28

# *Compleat Botanica* - Keyboard shortcuts

Sometimes using the mouse to navigate from one place to another is distracting. If you're a touch-typist, you'll want to learn the keyboard shortcuts that can help you get from one part of The Compleat Botanica to another.

| Key combination | Command |
|---|---|
| <Ctrl> <page up> | Go to previous page |
| <Ctrl> <page down> | Go to next page |
| <Ctrl> <left> | Switch to left pane |
| <Ctrl> <right> | Switch to right pane |
| <Ctrl> F | Find |
| <Ctrl> X | Cut and place on clipboard |
| <Ctrl> C | Copy to clipboard |
| <Ctrl> V | Paste from clipboard |
| <Ctrl> P | Print |
| <Ctrl> T | Print tags |

| | |
|---|---|
| F5 | Refresh |
| <Alt> <left> | Go back one page in the Pathfinder |
| <Alt> <right> | Go forward one page in the Pathfinder |

*Compleat Botanica* - Charts

## Index to chart topics

| | |
|---|---|
| **The RHS color chart numbering system** | The three fields for describing the colors of leaves and flowers use the Royal Horticultural Society's color numbering system. |
| **Soil texture and the Bienz Soil Chart** | The twelve soil textures used in The Compleat Botanica come from the Bienz Soil Chart published by the United States Department of Agriculture. |
| **USDA plant hardiness zone map** | The United States Department of Agriculture's plant hardiness zones were originally developed in 1960 with the assistance of the American Horticultural Society. |

## *Compleat Botanica* - The RHS color chart numbering system

The fields for describing the colors of leaves, flowers, bark, dyes, and other interest use either the Royal Horticultural Society's color numbering system or common names.

First developed in 1966, the RHS system uses a set of "paint chips" each with a small hole in the center. The color strip is placed over the leaf or blossom and is matched by peering through the hole. In all there are 884 different colors arranged in four fans. Growers, registration authorities, and specialist organizations use these colors to precisely describe plants.

> Note that the colors shown on your monitor are only approximations of the true RHS color.

The alternative to using RHS colors is to use the less precise, but much more imaginative system of common color names.  You can use the category view to define you own color names or you can use the basic or expanded set of names supplied with the software.

# *Compleat Botanica* - Soil texture and the Bienz Soil Chart

The twelve principal soil textures used in The Compleat Botanica come from the Bienz Soil Chart published by the United States Department of Agriculture.
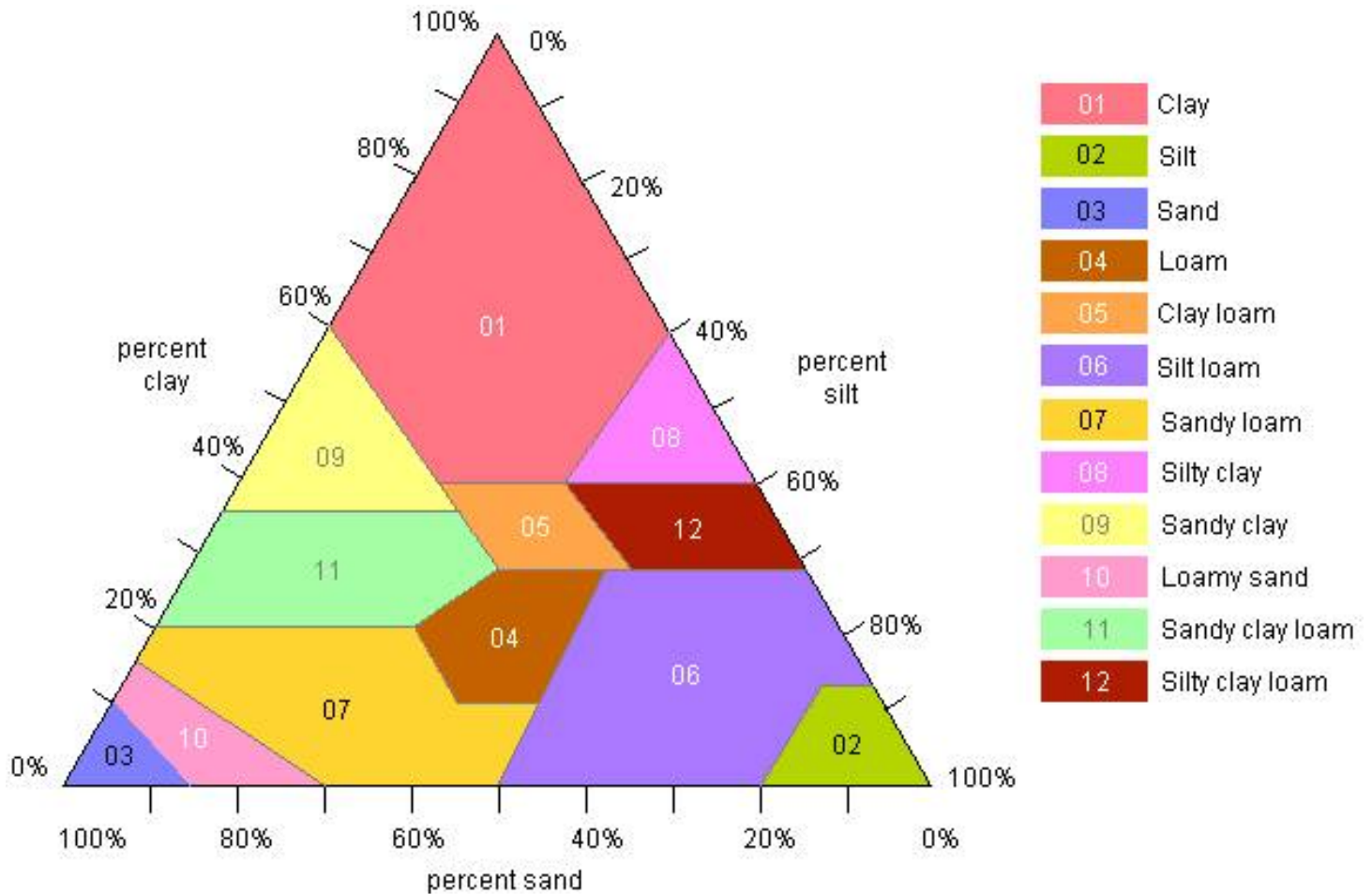
| | |
|---|---|
| 01 | Clay |
| 02 | Silt |
| 03 | Sand |
| 04 | Loam |
| 05 | Clay loam |
| 06 | Silt loam |
| 07 | Sandy loam |
| 08 | Silty clay |
| 09 | Sandy clay |
| 10 | Loamy sand |
| 11 | Sandy clay loam |
| 12 | Silty clay loam |

| | |
|---|---|
| sand | particles more than 0.05 mm in diameter |
| silt | particles between 0.002 mm and 0.05 mm in diameter |
| clay | particles less than 0.002 mm in diameter |
| loam | equal amounts of sand, silt, and clay particles along with humus, water, and air. |

In addition to the twelve Bienz soil textures, many horticulture and garden books use a less precise set of soil types. These are listed as numbers 20 through 31 in the chart below.

| | |
|---|---|
| 00 | Various |
| 01 | Clay |
| 02 | Silt |
| 03 | Sand |
| 04 | Loam |
| 05 | Clay loam |
| 06 | Silt loam |
| 07 | Sandy loam |
| 08 | Silty clay |
| 09 | Sandy clay |
| 10 | Loamy sand |
| 11 | Sandy clay loam |
| 12 | Silty clay loam |
| 20 | Light |
| 21 | Heavy |
| 22 | Fertile |
| 23 | Rich |
| 24 | Bog |
| 25 | Organic |
| 26 | Average |
| 27 | Loose |
| 28 | Poor |
| 29 | Sandy |
| 30 | Gravelly |
| 31 | Rocky |

# *Compleat Botanica* - USDA plant hardiness zone map

The United States Department of Agriculture's plant hardiness zones were originally developed in 1960 with the assistance of the American Horticultural Society. The original 11 zones became synonymous with "mean minimum temperature" because the zones were stratified by increments of ten degrees Fahrenheit, and were identified with the average lowest winter temperature for a geographic region. In fact, the original basis for the zones was latitude and longitude with local variances applied for wind, snow, winter sunshine, humidity and soil.

The zones were updated in 1990 splitting each of zones 2 through 10 into an upper and lower half, labeled "a" and "b", which were assigned five degree Fahrenheit increments in the legend. This latest version of the map is based on lowest recorded temperatures in the United States and Canada between 1974 and 1986; and the lowest recorded temperatures in Mexico between 1971 and 1984.

The zone ratings in practice are used to indicate not just mere survival of a plant species, but excellent adaptability of the species to the climate.

## *Compleat Botanica* - Customizing the software
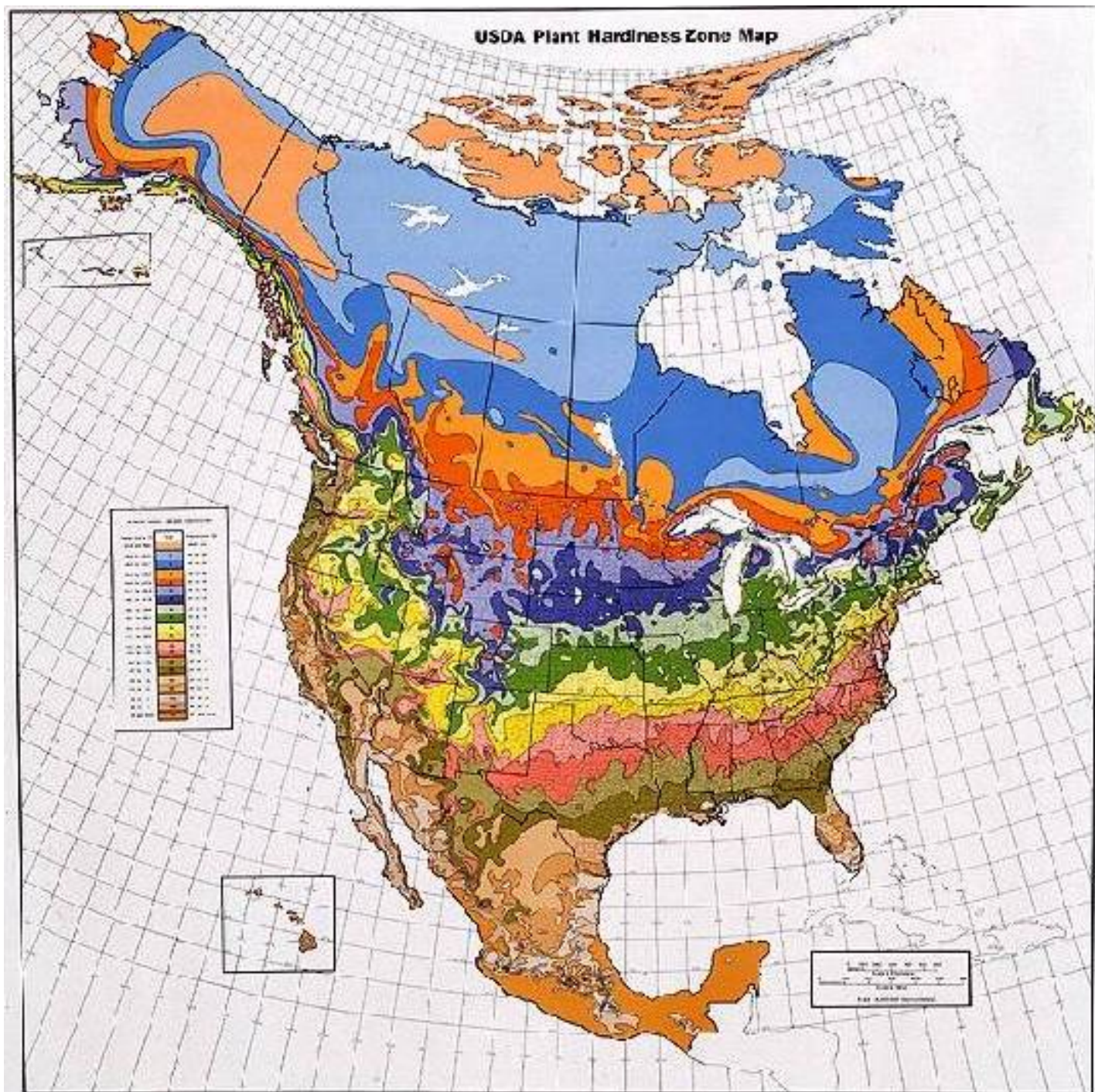
## Index to customizing topics

| | | |
|---|---|---|
| **Customizing the appearance of the software** | There are several options for customizing the appearance of The Compleat Botanica. |
| **Choosing measurement units for database entries** | When you first install The Compleat Botanica, measurements for height and spread use US Customary units (inches and feet). If you prefer, you can change this to the metric system (centimeters and meters). |
| **Choosing measurement units for reports and labels** | Printing units can be either metric or US Customary units. |
| **Switching between Fahrenheit and Celsius scales** | When The Compleat Botanica is first installed, the temperature scale for USDA hardiness zones is set to Fahrenheit. If you want to use Celsius instead you can make the switch in the Customize Settings window. |
| **Changing the display format for dates** | We all have different customs when it comes to abbreviating dates. |
| **Formatting specimen numbers** | The Compleat Botanica is designed to automatically generate unique specimen numbers whenever you create a new record. |
| **Changing the specimen list font size** | As an aid in making it more comfortable to use The Compleat Botanica, you can increase the size of the font used in the Specimen List. |

| | | |
|---|---|---|
| ℹ | **Changing the window color scheme** | As the seasons progress and your mood changes, you may like to change the color scheme used for The Compleat Botanica's windows. |
| ℹ | **Choosing which color values to use** | You can choose to use common names or Royal Horticultural Society color chart numbers in each of the color value columns. |
| ℹ | **Changing the list of distribution codes** | If you are collecting and recording species distribution data, you'll want to customize which codes appear in the distribution column. |

# *Compleat Botanica* - Customizing the appearance of the software

There are several options for customizing the appearance of The Compleat Botanica. If you want to change the color scheme or font size of the windows look here for more information:

*      [Changing the window color scheme](#)

*      [Changing the specimen list font size](#)

*      [Initial record limit](#)

If you want to change the way temperatures, measurements, colors and dates are displayed look here for more information:

*      [Switching between Fahrenheit and Celsius scales](#)

*      [Choosing measurement units for database entries](#)

*      [Choosing measurement units for reports and labels](#)

*      [Choosing which color values to use](#)

*      [Changing the display format for dates](#)

*      [Changing the list of distribution codes](#)

If you want to modify the way new specimen numbers are formatted look here for more information:

**\*** [Formatting specimen numbers](#)

If you want to change the way family names are shown look here for more information:

**\*** [Family name endings](#)

If you want to change the location of your picture files look here for more information:

**\*** [Setting the default picture directory](#)

If you want to change the contents and appearance of items in the Abstract View look here:

**\*** [How do I customize the Abstract View](#)

## *Compleat Botanica* - Choosing measurement units for database entries

When you first install The Compleat Botanica, measurements for height and spread use US Customary units (inches and feet).
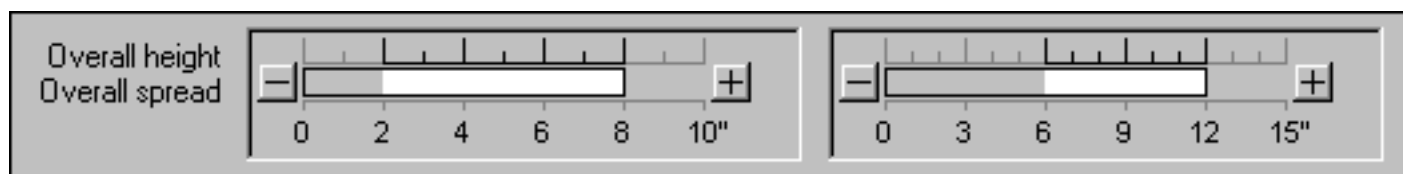


If you prefer, you can change this to the metric system (millimeters, centimeters and meters). To do this, go to the Customize settings window.
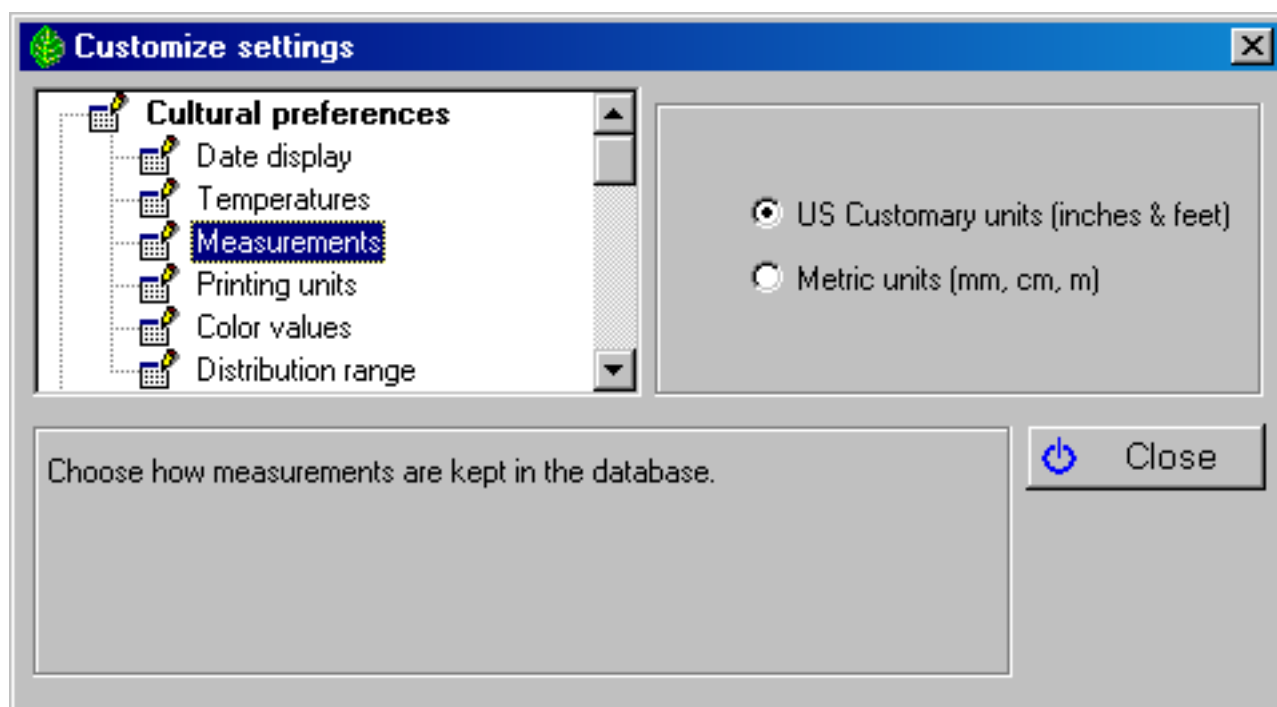


Note that all existing specimen records will be converted and that this conversion, while accurate in one direction, is not reversible.  For example, converting 6" from US Customary to metric will result in 15cm, but converting 15cm from metric to US Customary will result in 5" .

**The Compleat Botanica**  ✕

Changing the measurement scale will require all existing specimen records to be converted. This will result in a minor loss of precision.

Is that what you want to do?

[ Yes ]    [ No ]

**The Compleat Botanica**  ✕

All specimen records have been converted.

You should review and adjust any filters defined using the old measurement units.

[ OK ]
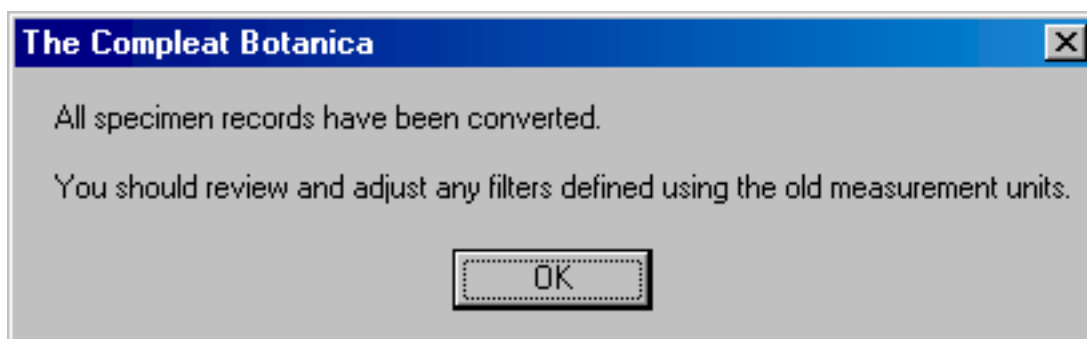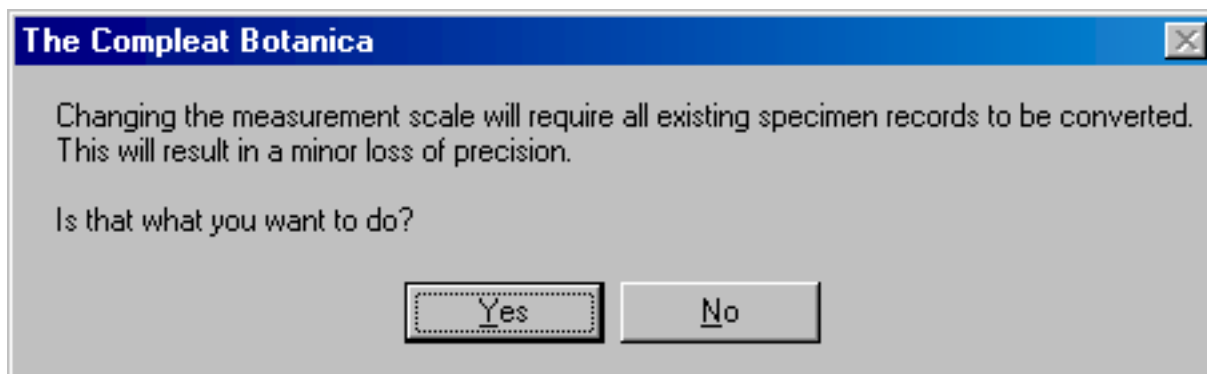
Here is what the converted height and spread will look like:
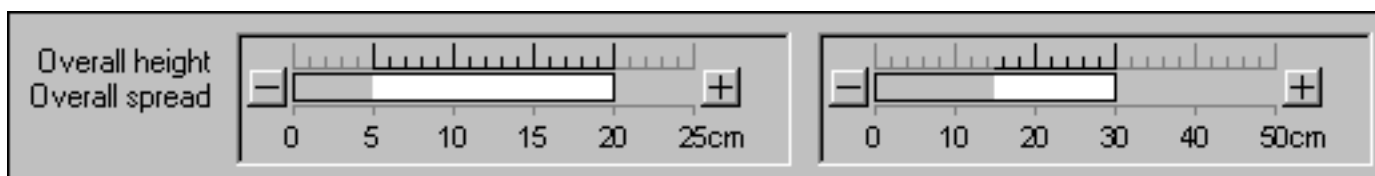
Overall height
Overall spread

0   5   10   15   20   25cm          0   10   20   30   40   50cm

# *Compleat Botanica* - Choosing measurement units for reports and labels

When you print labels or reports for the first time, you are prompted to choose which type of units to use for specifying dimensions.
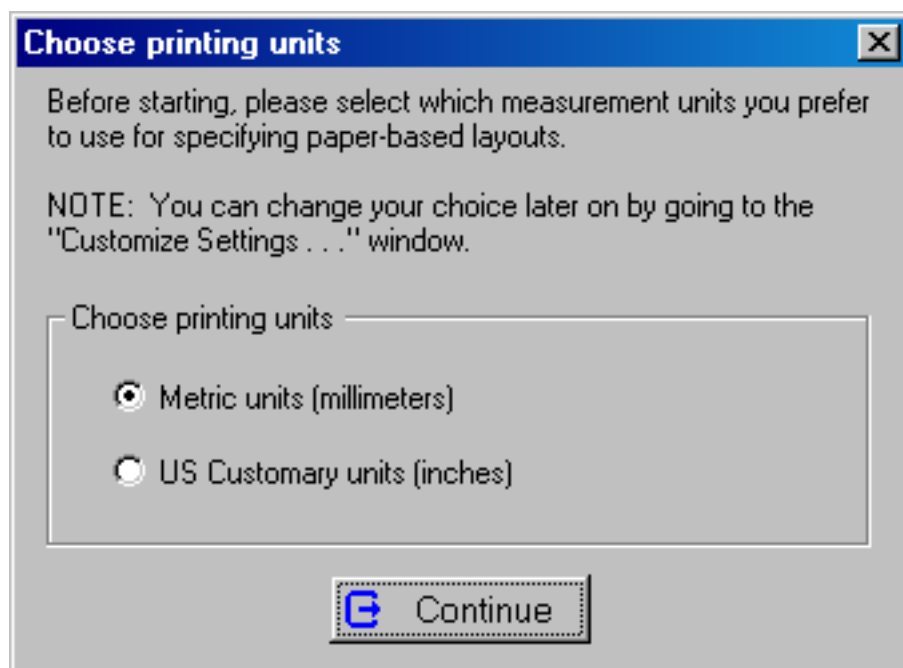


This choice can be made again at a later time using the **Printing units** option under **Cultural preferences**.



This choice is used by both report definitions and the label format editor. New reports and labels that you create will start with either ISO "A4" or Amerian "Letter" dimensions based on this choice.

Width: | Height:
210.0 mm | 297.0 mm
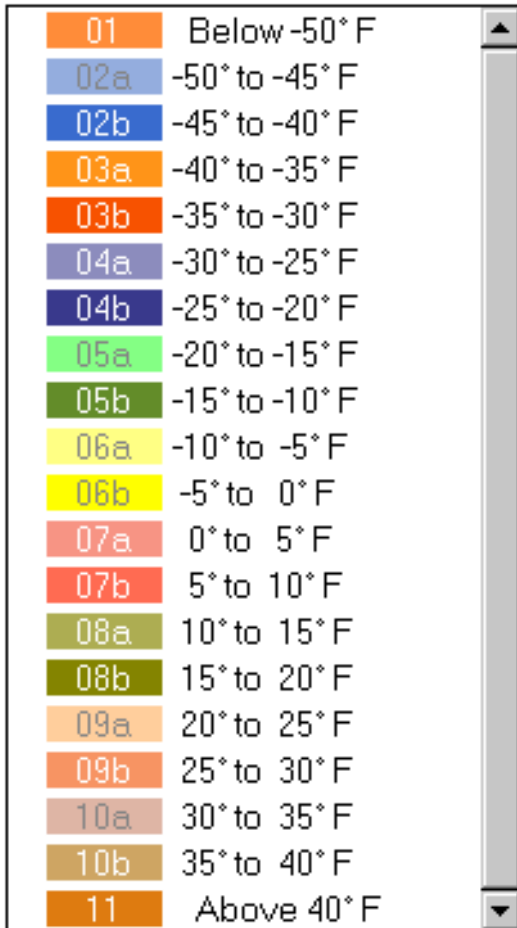
Width: | Height:
8 1/2" | 11"

# *Compleat Botanica* - Switching between Fahrenheit and Celsius scales

When The Compleat Botanica is first installed, the temperature scale for USDA hardiness zones is set to Fahrenheit.

| Zone | Range |
|------|-------|
| 01 | Below -50° F |
| 02a | -50° to -45° F |
| 02b | -45° to -40° F |
| 03a | -40° to -35° F |
| 03b | -35° to -30° F |
| 04a | -30° to -25° F |
| 04b | -25° to -20° F |
| 05a | -20° to -15° F |
| 05b | -15° to -10° F |
| 06a | -10° to -5° F |
| 06b | -5° to 0° F |
| 07a | 0° to 5° F |
| 07b | 5° to 10° F |
| 08a | 10° to 15° F |
| 08b | 15° to 20° F |
| 09a | 20° to 25° F |
| 09b | 25° to 30° F |
| 10a | 30° to 35° F |
| 10b | 35° to 40° F |
| 11 | Above 40° F |

If you want to use Celsius instead you can make the switch in the Customize Settings window.
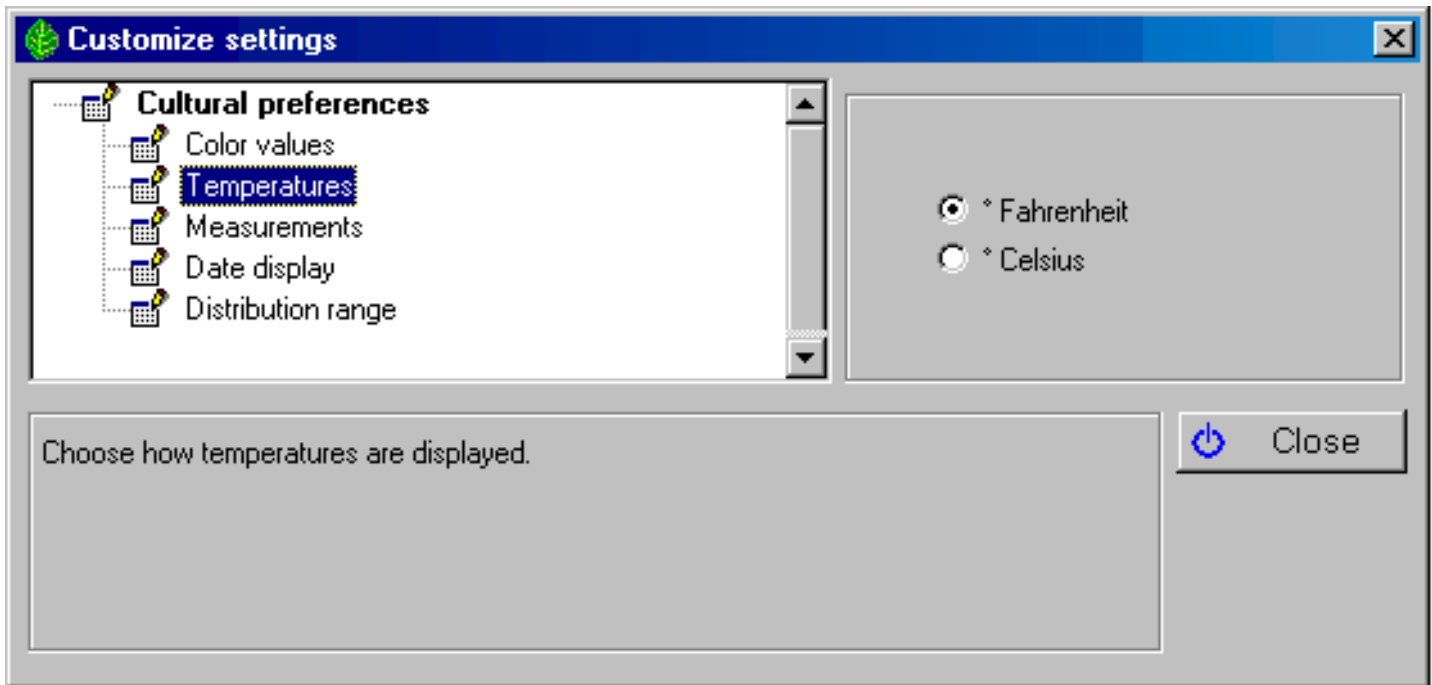
Now the USDA hardiness zones will look like this:

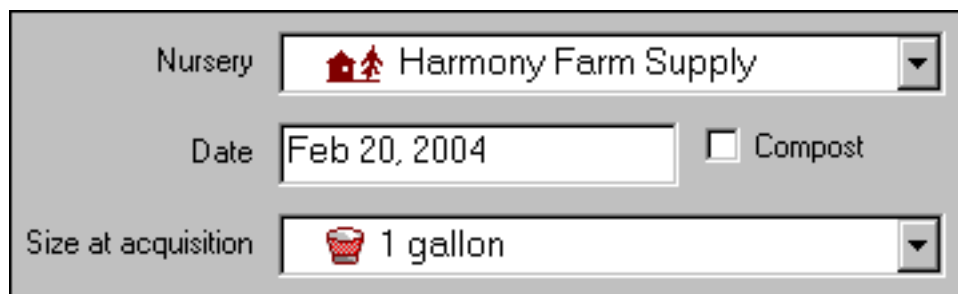*Compleat Botanica* **- Changing the display format for dates**

We all have different customs when it comes to abbreviating dates. You can specify how dates should be shown by using the Customize settings window.
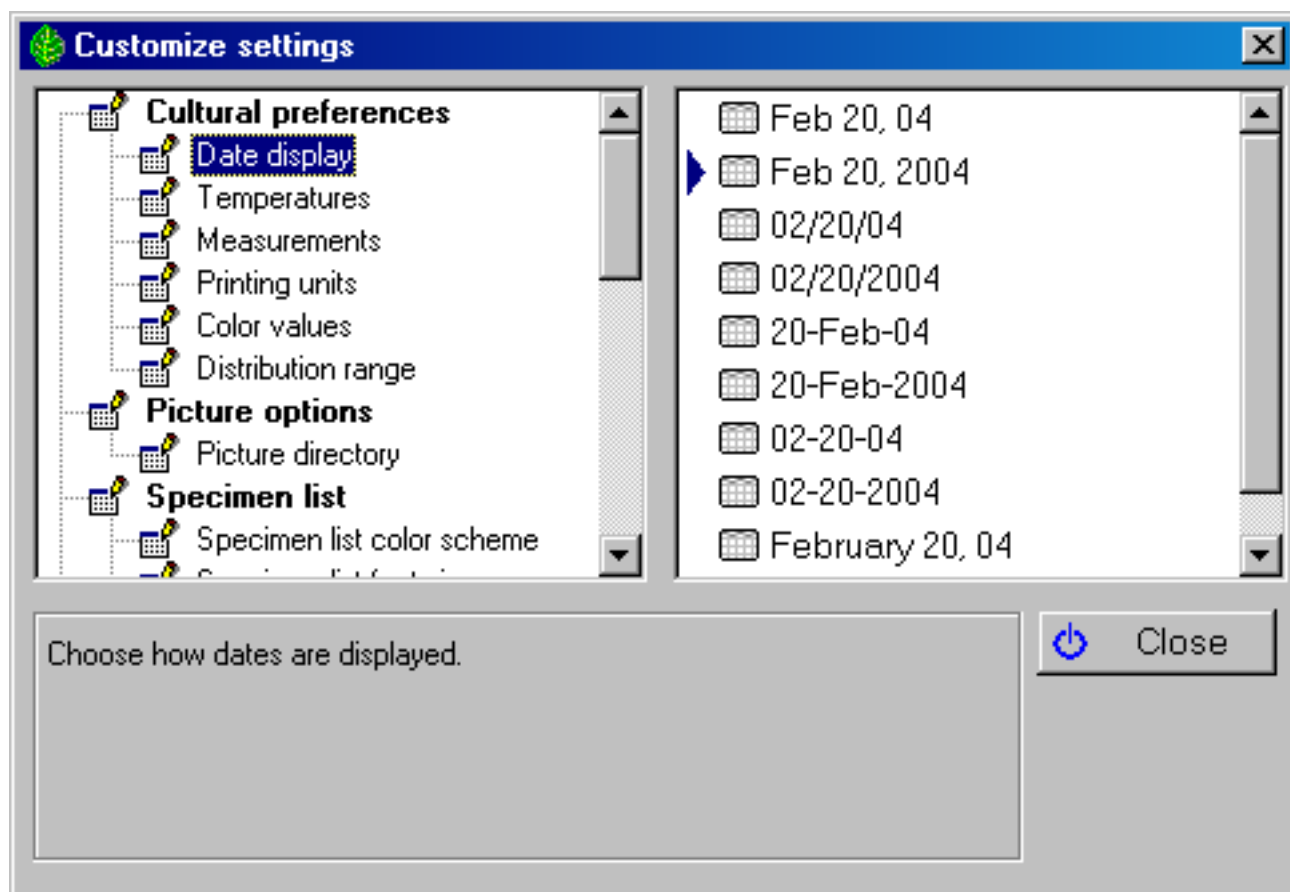


Here's a sample of the result.

## *Compleat Botanica* - Formatting specimen numbers

The Compleat Botanica is designed to automatically generate unique specimen numbers whenever you create a new record.  Note that some herbaria use the term "accession number" instead of  "specimen number".  These terms have the same meaning in The Compleat Botanica.

You have some flexibility in how these numbers are assigned and formatted. Using the Customize settings window you can specify how the numbers are to be formatted.

Type any prefix or suffix you want attached to all new specimen numbers here.
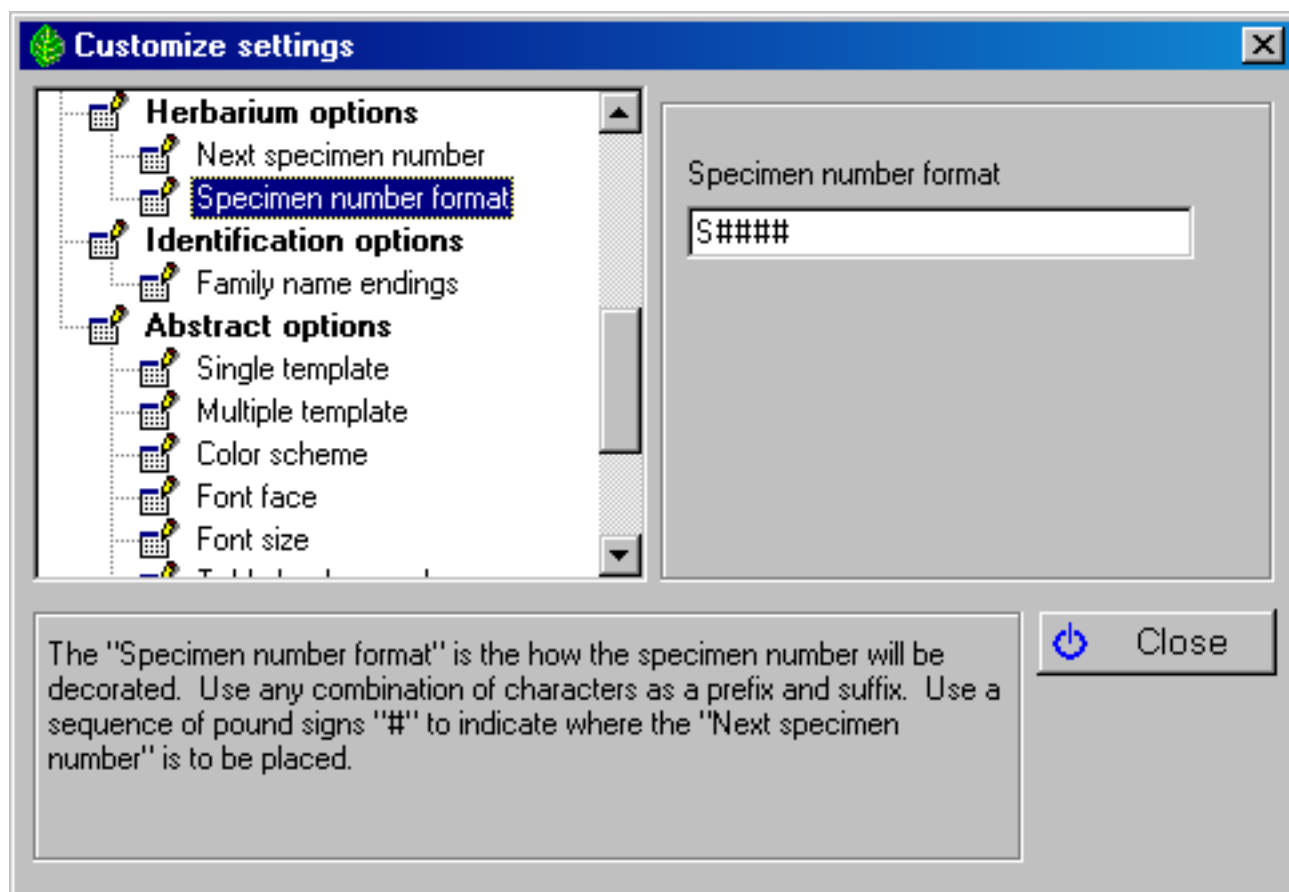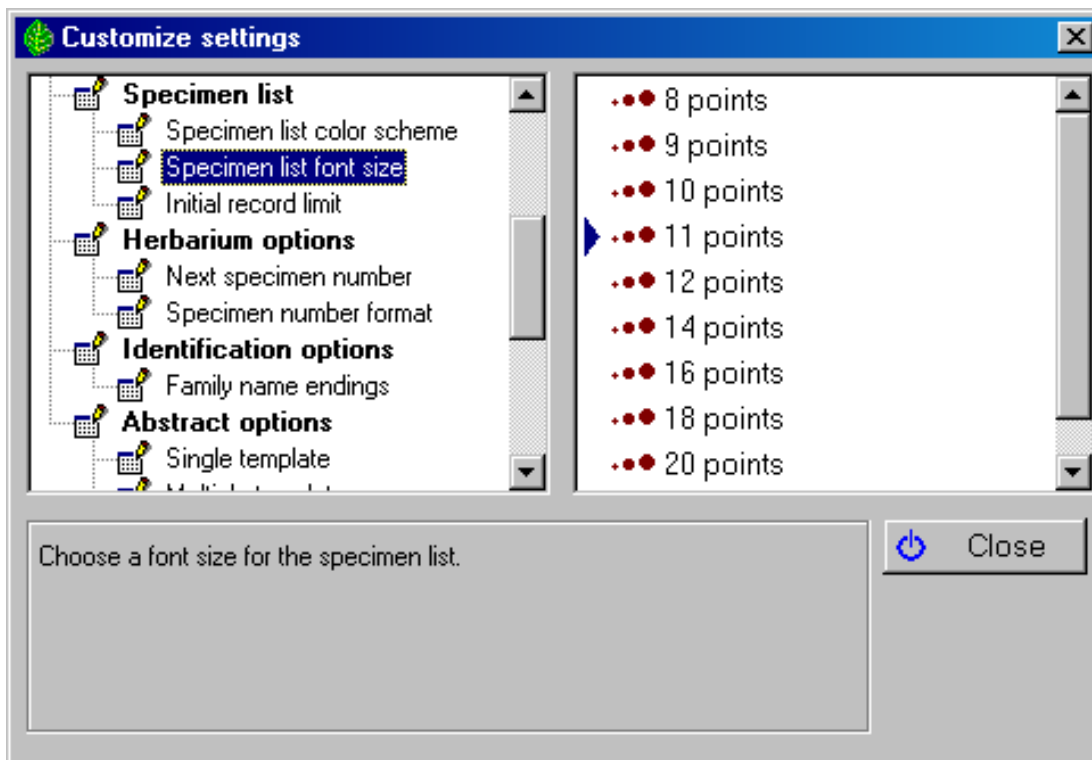


Use a sequence of pound signs "#" to indicate where you want the "Next specimen number" to be inserted.

Note that the total length of the specimen number including any prefix or suffix is limited to 20 characters.

Use the "Next specimen number" option to specify the unique portion of the specimen number. This is the portion that will automatically be incremented with each new record.

*Compleat Botanica* - Changing the specimen list font size
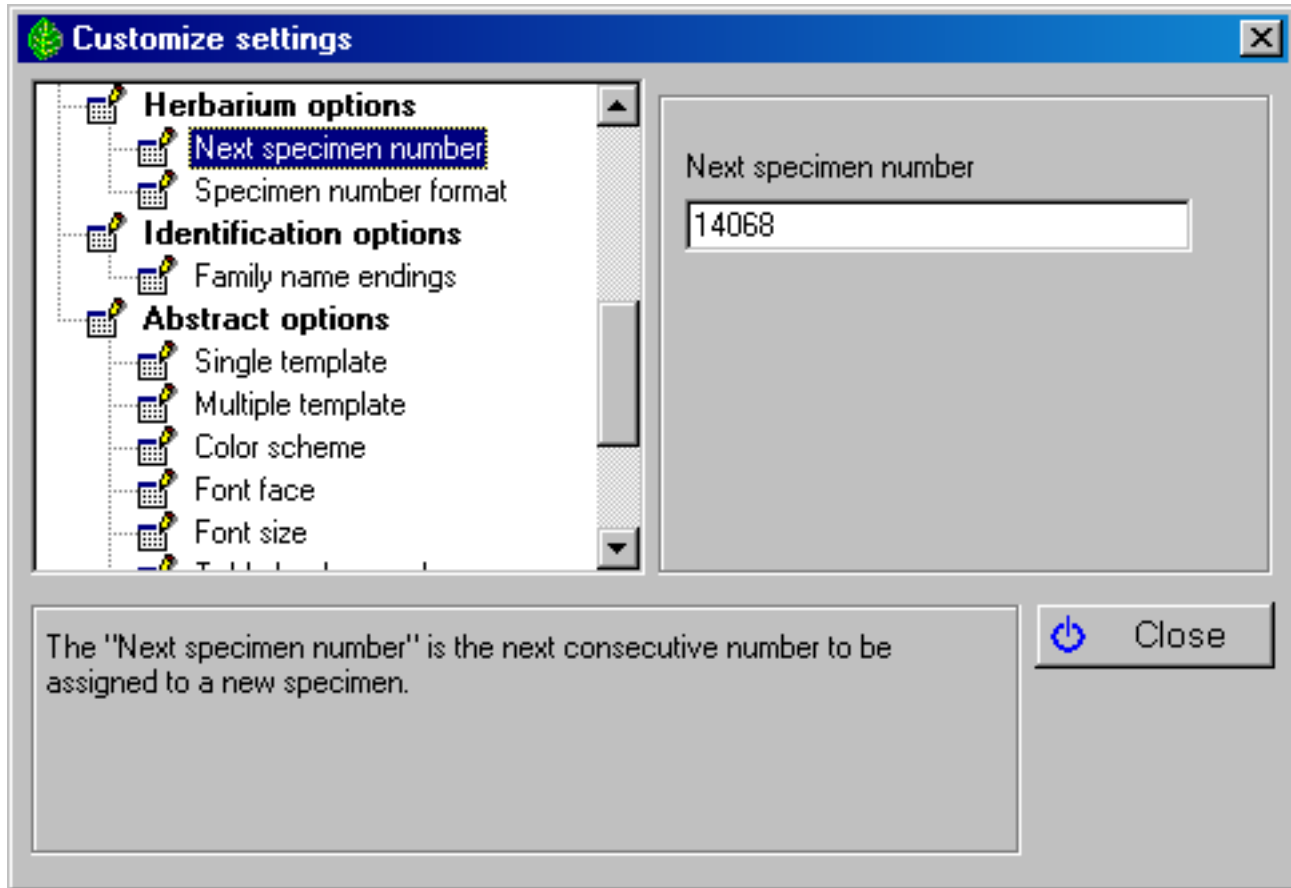
As we age it becomes a bit more stressful on our eyes to read tiny print. As an aid in making it more comfortable to use The Compleat Botanica, you can increase the size of the font used in the Specimen List.  Use the Customize setting window to do this:



The smallest font is 8 points

| ⚠ | USDA Zones | ⚠ Sunshine | Desirable qualities |
|---|---|---|---|
| **Acer macrophyllum** | | | |
| | 03b 11 Zones 03b-11 | ☀ Full sun | Tolerates wind |
| **Acer palmatum 'Butterfly'** | | | |
| | 05a 11 Zones 05a-11 | ☀☀ Partial sun or shade | Shade tolerant |
| **Acer palmatum 'Mizu Kuguri'** | | | |
| | 05a 11 Zones 05a-11 | ☀☀ Partial sun or shade | Attractive winter bark |
| **Acer palmatum 'Oshio Beni'** | | | |
| | 05a 11 Zones 05a-11 | ☀☀ Partial sun or shade | Autumn foliage |
| **Acer palmatum 'Sangokaku'** | | | |
| | 05a 11 Zones 05a-11 | ☀☀ Partial sun or shade | Autumn foliage |
| **Acer palmatum var. atropurpureum** | | | |
| | 05a 11 Zones 05a-11 | ☀☀ Partial sun or shade | Autumn foliage |

The largest font is 24 points

## *Acer macrophyllum*
| 03b | 11 | Zones 03b-11 | ☀ Full sun |

## *Acer palmatum* 'Butterfly'
| 05a | 11 | Zones 05a-11 | Partial sun or shade |

## *Acer palmatum* 'Mizu Kuguri'
| 05a | 11 | Zones 05a-11 | Partial sun or shade |

## *Acer palmatum* 'Oshio Beni'
| 05a | 11 | Zones 05a-11 | Partial sun or shade |

## *Acer palmatum* 'Sangokaku'
| 05a | 11 | Zones 05a-11 | Partial sun or shade |

## *Acer palmatum* var. *atropurpureum*
| 05a | 11 | Zones 05a-11 | Partial sun or shade |

# *Compleat Botanica* - Changing the window color scheme

As the seasons progress and your mood changes, you may like to change the color scheme used for The Compleat Botanica's windows. Do this using the Customize settings window:
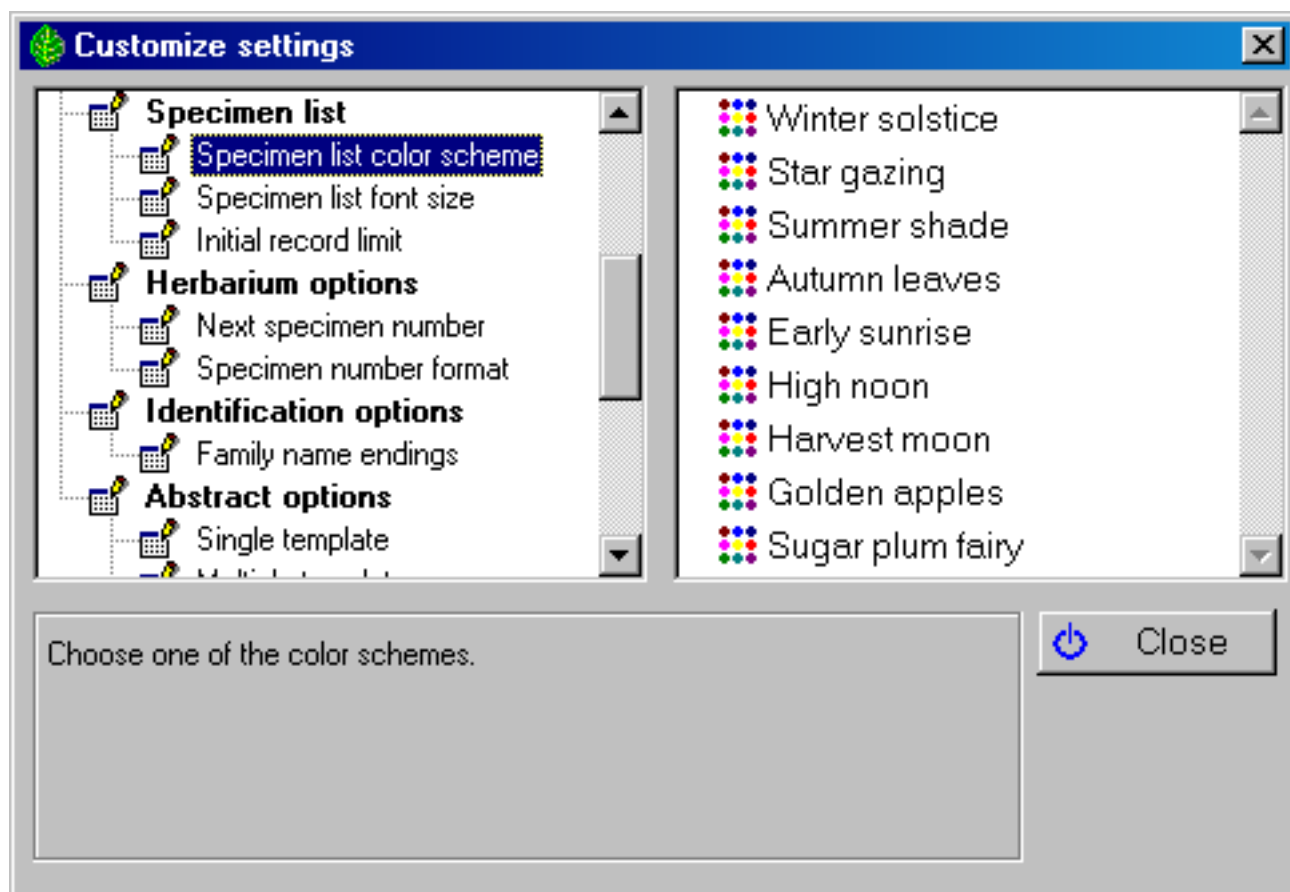


These settings affect the Specimen List and the banner at the top of each view

| |
|---|
| Winter solstice |
| Star gazing |
| Summer shade |
| Autumn leaves |
| Early sunrise |
| High noon |
| Harvest moon |
| Golden apples |
| Sugar plum |

Some of these color schemes are approximations of Bonnie Rosser Krims' excellent book *The perfect palette: fifty inspired color plans for every room in your home,* Warner Books Inc., 1998, New York.

# *Compleat Botanica* - Choosing which color values to use

You can choose to use popular color names or Royal Horticultural Society color chart numbers in each of the color value columns.
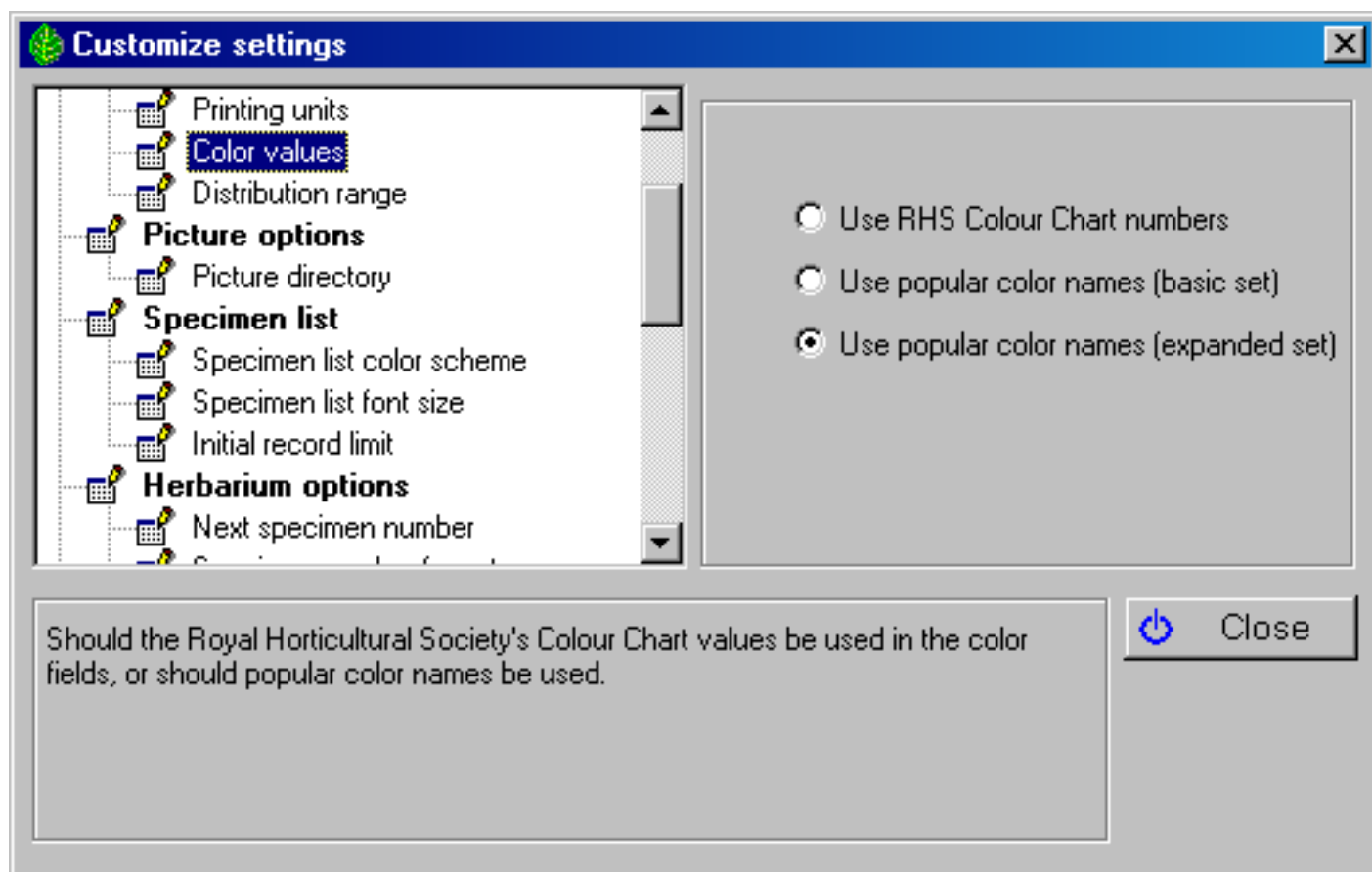


The 884 Royal Horticultural Society's color chart numbers will appear in color value columns looking something like this snapshot
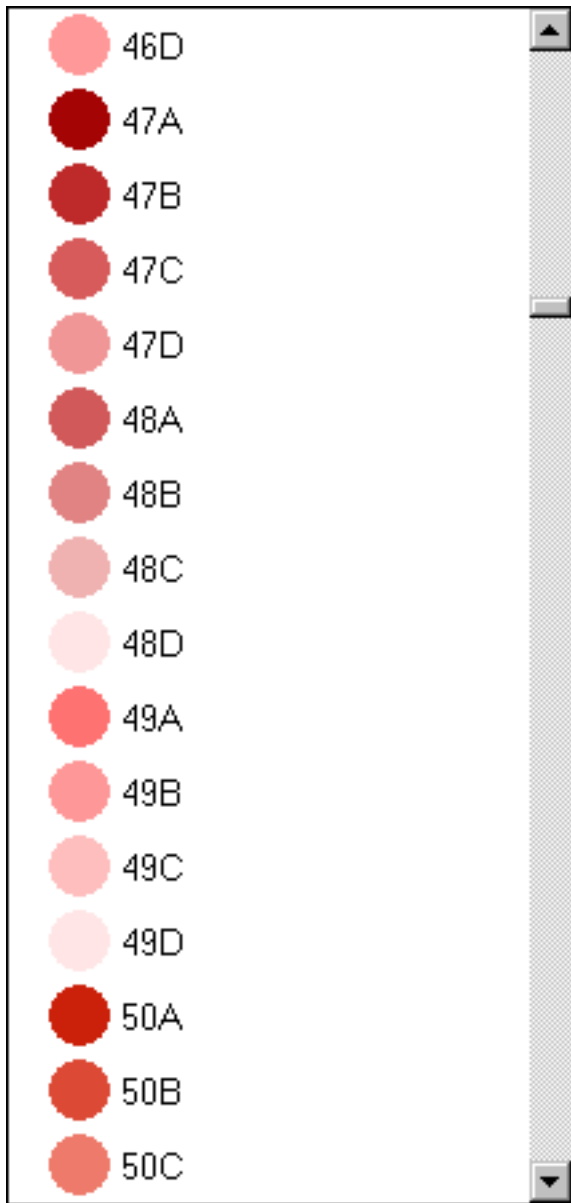
The Basic set of popular color names will appear something like this snapshot

amber
sienna
orange
vermillion
white
yellow
bronze
sepia
olive
green
chartreuse
cerulean
glaucous
cyan
turquoise
blue
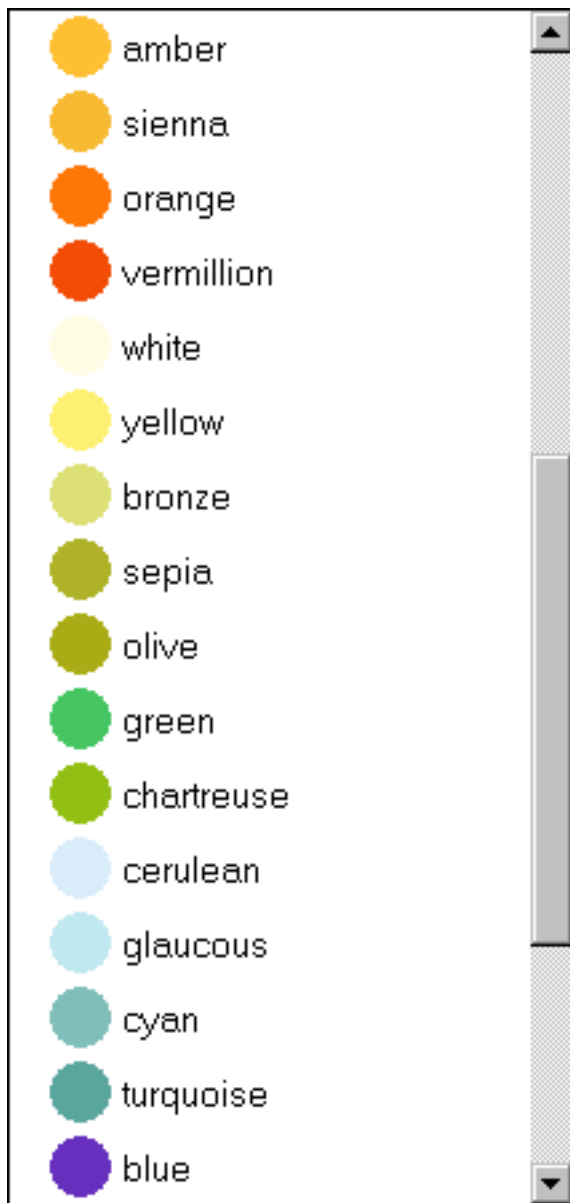
The Extended set of popular color names will appear something like this snapshot

- amber
- saffron
- madder
- terra-cotta
- sienna
- peach
- nasturtium
- auburn
- orange
- mahogany
- titian
- brimstone
- tangerine
- vermillion
- poppy
- gold

## *Compleat Botanica* - Changing the list of distribution codes

If you're collecting and recording species distribution data, you'll want to customize which codes appear in the distribution column.
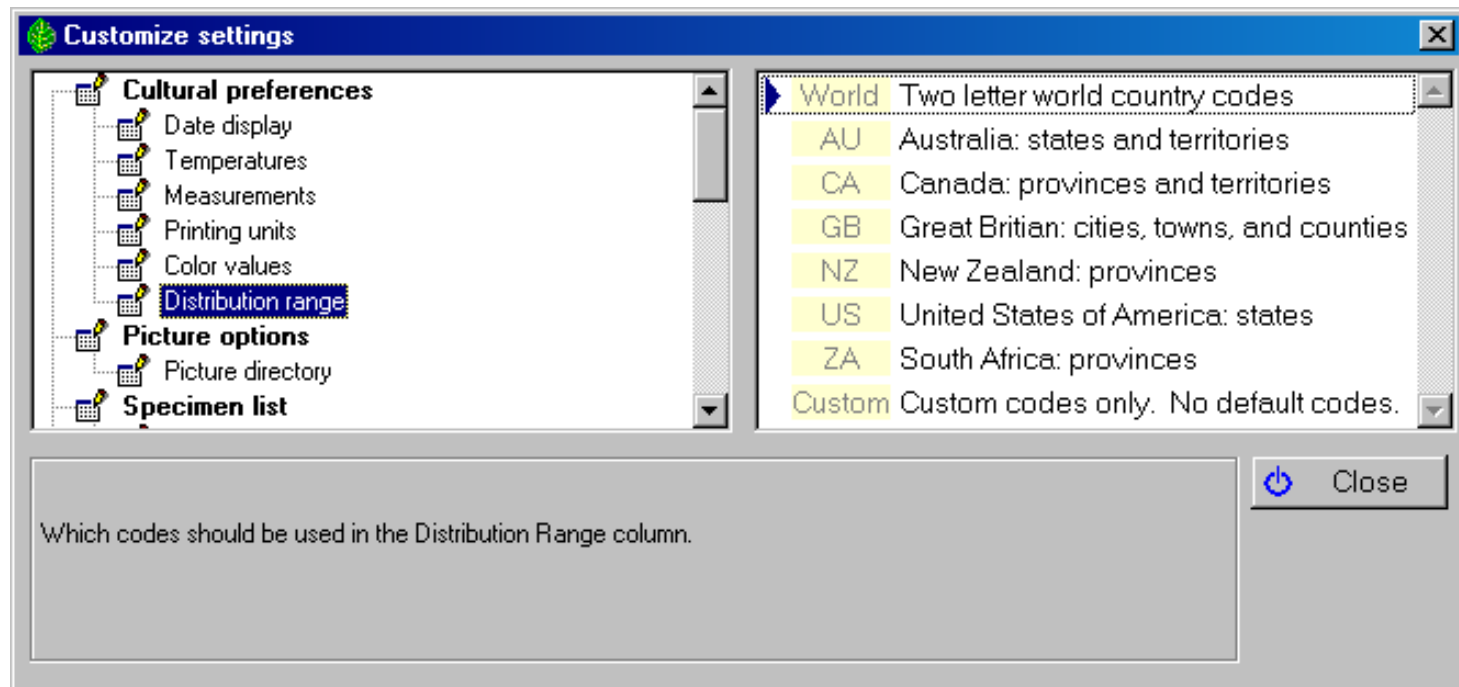


| World | Two letter country codes for United Nations member countries. |
|-------|---------------------------------------------------------------|
| AU    | Australian states and territories. |
| CA    | Canadian provinces and territories. |
| GB    | Great Britain's cities, towns and counties. |
| NZ    | New Zealand's provinces. |
| US    | State names for the United States of America. |
| ZA    | Provinces of South Africa. |
| Custom | Everything is deleted and only your own codes, as defined in the Categories View, are used. |

Whenever you make a change to the distribution codes in this way, you'll need to decide what to do with the existing codes that are defined. You can either keep the existing codes or completely start over.

**The Compleat Botanica**

You've selected a new set of codes which should be shown in the distribution range field.

Do you want to discard the existing codes?

"Yes" will discard all existing codes before adding the new ones.
"No" will keep the existing codes and add the new ones.

[ Yes ]    [ No ]

# *Compleat Botanica* - Citations and references
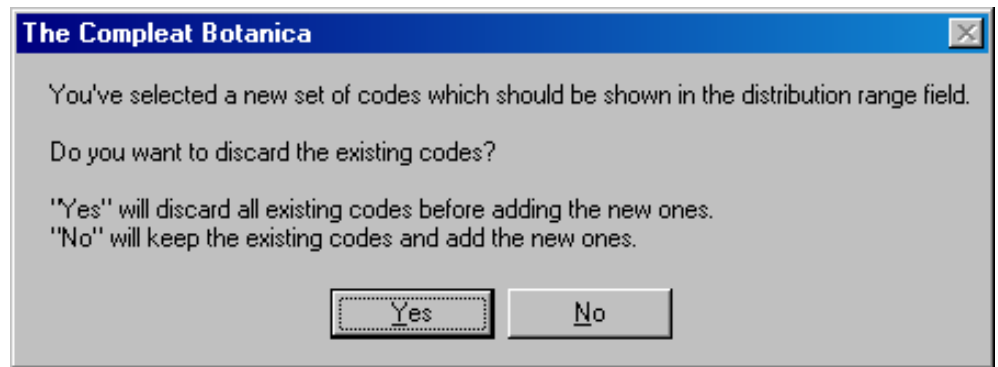
## Index to citations and references

| | | |
|---|---|---|
| ℹ️ **Colors used in The Compleat Botanica** | The beauty in plants is often brought to its peak by color. | **1** |
| ℹ️ **Soil types used in The Compleat Botanica** | The twelve soil textures used in The Compleat Botanica are recognized descriptions which have measurable characteristics. | **2** |
| ℹ️ **Climate zones used in The Compleat Botanica** | Climatology is the study of seasonal weather patterns occurring in a geographic region. | **3** |
| ℹ️ **Checklist of botanical names used in The Compleat Botanica** | The rules for taxonomic nomenclature have been under refinement ever since Linneaus first developed the binomial naming system. | **4** |
| ℹ️ **Sample database citations** | The sample database contains partial entries from a variety of sources to demonstrate how the software can be used for different purposes. | **5** |
| ℹ️ **Fragrance classifications used in The Compleat Botanica** | The eighteen different fragrance classifications provided as a starting point come from The Book of Perfumes | **6** |
| ℹ️ **Distribution classifications used in The Compleat Botanica** | Classification systems for wetlands, native plants, and endangered species. | **7** |

# *Compleat Botanica* - Colors used in The Compleat Botanica

Citations

## Colors used in The Compleat Botanica

The beauty in plants is often brought to its peak by color. Sometimes intense but more frequently subtle, the colors in bark, leaves, flowers, and fruit is usually the first thing we notice about a new plant. Describing color is hard to do because we have so few words to describe the continuous visible spectrum. Often the very best words such as chartreuse, turquoise, or vermillion are not understood by everyone. Other borrowed words like cinnamon and egg-yolk are evocative but imprecise. And who knows what navy-blue, barn-red and sea-green really mean?

Each paint manufacturer uses its own set of color chips and proprietary mixing schemes, so attempts to piggy-back off their efforts are futile. Computers use a hexadecimal system to cause monitors to fire cathode-ray tubes with different mixtures of red, green and blue thus producing a discrete set of colors. Computer printers use a similar system to mix dyes on paper. These systems produce similar results but are unfortunately subject to manufacturing differences.

The Maerz and Paul "Dictionary of Color" published in 1957 used a color scheme composed of 84 color patches beginning with the yellows (1:cream, 2:mimosa, 3:canary, 4:buttercup yellow) and continuing through the greens (81: lettuce green, 82:moss green, 83:fern green, 84:olive green). These are fun names, but can you guess what they look like? In this scheme plants were identified by number with three modifiers: + to indicate a darker shade, - to indicate a lighter tint, and **x** to indicate a blend of two colors.

In 1976, the US National Bureau of Standards published a list containing 7,500 color names and their definitions.  See `"Color: Universal Language and Dictionary of Names", U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 440, 1976`. This is weighty stuff; too cumbersome to be useful for plantsmen.

Overall, the best system for the description of plant colors is the one developed by The Royal Horticultural Society. In use since 1966 and updated most recently in 2001, this system is the standard among serious botanists. The RHS Colour Chart is composed of four fans. Each fan contains approximately one quarter of the 221 sheets. Each sheet contains four color patches labeled A, B, C, and D. The complete chart is composed of 884 colors.

To obtain the RHS Colour Chart write to:

RHS Garden
Wisley
Woking
Surrey, UK GU23 6QB

or send e-mail to [mailorder@rhs.org.uk](mailto:mailorder@rhs.org.uk). The approximate cost is £117.50.

*Compleat Botanica* - Soil types used in The Compleat Botanica

Citations

## Soil types used in The Compleat Botanica

The twelve soil textures used in The Compleat Botanica are recognized descriptions which have measurable characteristics. These names are defined in the Bienz Soil Chart published by the United States Department of Agriculture and included in "Horticulture Gardener's Desk Reference", Anne Moyer Halpin, MacMillan, New York NY USA, 1966.

Many other soil descriptions are commonly used. Such terms as serpentine, humus-rich, well-drained, or rocky may be what you're more familiar with. These customizations can easily be added to the soil texture category.

The soil pH descriptions of strongly acidic, moderately acidic, slightly acidic, neutral, slightly alkaline, moderately alkaline, and strongly alkaline, are vernacular terms appearing frequently in horticulture and garden books.

## Climate zones used in The Compleat Botanica

Climatology is the study of seasonal weather patterns occurring in a geographic region. The key factors influencing climate are altitude, latitude, and the proximity to large bodies of water. Several simple but useful schemes attempt to capture these factors into well-defined discrete categories. The most useful of these for the United States of America are:

The **USDA hardiness zones**, published by the United States Department of Agriculture.

The **AHS heat zones**, a complement to the USDA hardiness zones. There are 12 geographic zones based on the number of days which reach 86 degrees Fahrenheit. This is published by The American Horticultural Society, 7931 East Blvd. Dr., Alexandria VA, 22308 USA. See also `"Heat-Zone Gardening: How to choose plants that thrive in your region's warmest weather"`, Linda Bellamy & Henry Marc Cathey, Time Life, New York NY USA, 1998.

The **Sunset climate zones**, published in the `"Sunset National Garden Book"`, The editors of Sunset Books and Sunset Magazine, Sunset Books Inc., Menlo Park CA USA, 1997.

The first 24 of these zones were previously published in `"Sunset Western Garden Book"`, The editors of Sunset Books and Sunset Magazine, Sunset Books Inc., Menlo Park CA USA, 1988.

The **Plant communities** are published in `"A California Flora and Supplement"`, Philip A. Munz & David D. Keck, University of California Press, 1959, 1968.

The **Biotic communities** represent the hierarchical classification system published in `"A Classification of North American Biotic Communities"`, David E. Brown, Frank Reichenbacher and Susan E. Franson, University of Utah Press, 1998. This system defines seven global "realms": Nearctic, Palearctic, Neotropical & Antarctian, Indomalayan, African, Australian, and Oceanic. Within each realm are defined four "hydrologic regimes": Natural upland vegetation, Natural wetland vegetation, Aquatic/submerged freshwater, and Marine environment. These hydrologic regimes are subdivided into six "formation-types": Tundra, Forest and Woodland, Scrubland-grassland, Desertland, and Non-vegetation. Further refinement of this hierarchical system extends to four "climactic zones", multiple "biotic communities", "series", "associations", and "strands".

# *Compleat Botanica* - Checklist of botanical names used in The Compleat Botanica

## Checklist of botanical names used in The Compleat Botanica

The rules for taxonomic nomenclature have been under refinement ever since Linneaus first developed the binomial naming system. The International Botanical Congress has been meeting every 10 years since 1850 to keep the rules acceptable and fair. The Sixteenth Congress adopted the [International Code of Botanical Nomenclature (Saint Louis Code)](#) in August of 1999. This is the authoritative reference on how names are formulated, how duplicates are resolved, and how exceptions to the rules are handled. It is published as "`International Code of Botanical Nomenclature (St Louis Code)`", W. Greuter Chairman, Regnum Vegetabile 131, Koeltz Scientific Books, Königstein: 2000.

The **source** field of each name in the The Compleat Botanica Checklist gives an abbreviated reference to the publication from which the taxon, its author, and its original publication were obtained. The chart below lists the full citation for these abbreviated source fields.

| Checklist "source" field | Taxa covered | Citation |
|---|---|---|
| Margulis | regnum and divisio (phylum) | "Five Kingdoms: An Illustrated Guide to the Phyla of Life on Earth", Lynn Margulis & Karlene V. Schwartz, W. H. Freeman and Company, New York NY USA, 1982. |
| UCMP | regnum, divisio, classis, ordo | UMP Taxon Lift, University of California Museum of Paleontology, Regents of the University of California, 1994-2001. |
| Reveal | classis, ordo, familia | Index Nominum Supragenericorum Plantarum Vascularium Project. Reveal, J.L., Index Nominum Supragenericorum Plantarum Vascularium Project, 1995-2001. |
| Turner | ordo, familia | "Botanica", pp. 959-962, R.G. Turner Jr. & Ernie Wasson, Editors, Random House Australia Pty Ltd. |
| Savela | classis, ordo, familia | Life forms list, Markku Savela, 2001. |

| | | |
|---|---|---|
| Hole | classis, ordo, familia | A Checklist of the Vascular Plant Families, Robert B. Hole, Jr., BiologyBase, 1995-2001. |
| Jepson | families | "The Jepson Manual: Higher Plants of California", pp 1319-1321, James C. Hickman, editor, The Regents of the University of California: 1996 |
| RBG | genus | Famfiles, Board of Trustees of the Royal Botanic Gardens, Kew, 2000. |
| NRCS | genus, species, variety | USDA, NRCS. 2001. The PLANTS Database, Version 3.1 The PLANTS Database. National Plant Data Center, Baton Rouge, LA 70874-4490 USA. |

**Alternative classifications of the families are available from:**

Classification of Flowering Plants, Kåre Bremer, Mark W. Chase, and Peter F. Stevens, The Angiosperm Phylogeny Group 1998, Dept. of Systematic Botany, Uppsala University.

# Compleat Botanica - Sample database citations

## Sample database citations

The sample database contains partial entries from a variety of sources to demonstrate how the software can be used for different purposes. The **data source** field is an indication of where the source data for the entries was obtained. Please refer to the cited publications for more about each of the specimen in the sample database.

| "source" field | Citation |
|---|---|
| Allergy | "Allergies A-Z", Myron A Lipkowitz and Tova Navarra, Facts on File, New York, 1994. |
| BotLatin | "Botanical Latin: History, Grammer, Syntax, Terminology and Vocabulary", William T. Stern, Hafner Publishing Company, New York, 1966. |
| BtrflyCa | "Common butterflies of California", Bob Stewart, West Coast Lady Press, Patagonia Arizona, 1998. |
| CaBskt | "Plants used in basketry by the California Indians", Ruth Earl Merrill, Acoma Books, Ramona CA, 1971 (originally published 1923 by University of California Publications in "American Archeology and Ethnology." |
| ColorNat | "Colors from nature : growing, collecting & using natural dyes", Bobbi A. McRae, Storey Communications Inc, Pownal Vermont, 1993. |
| DeerPrf | "Deer proofing your yard & garden", Rhona Massingham Hart, Storey Communications Inc, Pownal Vermont, 1997. |
| DyeFib | "Dyes & Fibers", Will Bearfoot, Oliver Press, Willits California, 1975. |
| DyePl | "Dye plants and dyeing -- a handbook", EthelJane McD. Schetky, editor, Brooklyn Botanic Garden, Brooklyn New York, 1964. |
| Frgnt | "The Fragrant Garden. A book about sweet scented flowers and leaves", Louise Beebe Wilder, Dover Publications, New York, 1974. Originally published as "The Fragrant Path", Louise Beebe Wilder, 1932, The Macmillan Company. |
| GrUnFr | "Growing Unusual Fruit", Alan E. Simmons, Walker and Company, New York, 1972. |

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| HtZn | "Heat-zone Gardening: How to choose plants that thrive in your region's warmest weather", Dr. H. Marc Cathey with Linda Bellamy, American Horticultural Society, Time-Life Books, 1998. |
| HumGrdn | "Hummingbird Gardens: Turning your yard into hummingbird heaven", Stephen W. Kress, editor, Brooklyn Botanic Garden, Brooklyn New York, 2000. |
| MedPl | "The Encyclopedia of Medicinal Plants", Andrew Chevallier, DK Publishing, New York, 1996. |
| NWBskt | "Northwest Indian Basketry", Genevieve Baird, The Washington State American Revolution Bicentennial Commission, The Washington State Historical Society, 1976. |
| Poison | "A field guide to venomous animals and poisonous plants of North America north of Mexico", Peterson Field Guides, Steven Foster and Roger Caras, Houghton Mifflin Company, Boston, 1994. |
| PrvntDeer | "A gardener's guide to preventing deer damage", Bob Coey and Kenneth Mayer, California Department of Fish and Game, 1991. |
| UnFruit | "Uncommon Fruits Worthy of Attention: A Gardener's Guide", Lee Reich, Addison-Wesley Publishing, Reading, Massachusetts, 1991. |
| UnVeg | "Unusual Vegetables: Something New for This Year's Garden", Anne Moyer Halpin, editor, Organic Gardening and Farming, Rodale Press, Emmaus, Pennsylvania, 1978. |
| Xeri | "Xeriscape Gardening: Water Conservation for the American Landscape", Connie Lockhart Ellefson, Thomas L. Stephens, and Douglas Welsh, Macmillan Publishing Company, New York, 1992. |
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## Fragrance classifications used in The Compleat Botanica

The eighteen different **fragrance** classifications provided as a starting point come from `"The Book of Perfumes", Eugene Rimmel, Chapman and Hall, London, 1865.`

An alternative classification scheme by William A. Poucher is his scale of 100 based on the evaporative rate of a plant's volatile aromatic compounds.  Originally published in 1923, now in it's 10th edition 77 years later: `"Perfumes, Cosmetics and Soaps", 10th edition, William A. Poucher, Hilda Butler editor, Kluwer Academic Publishers, Norwell, MA 2000.`

For a good list of plants used in the perfume industry see `"The Perfume Handbook", Nigel Groom, Chapman & Hall, London, 1992.`  This book includes descriptions of the essential oils provided by plants used in the perfumery world, both historic and contemporary.

An alternative list of fragrance classifications also comes from `"The Book of Perfumes":`

| Classification |
| --- |
| Almondy |
| Amber |
| Anise |
| Balsamic |
| Camphoraceous |
| Caryophyllaceous |
| Citrine |
| Fruity |
| Jasmine |

Lavender

Minty

Musky

Orange flower

Rosaceous

Sandal

Spicy

Tuberose

Violet

## Distribution classifications used in The Compleat Botanica

Wetlands are transitional regions which vary between fully terrestrial and fully aquatic areas.  The water table in wetlands is usually at or near the surface.  Land covered by shallow water is also included in the definition.  In these regions the land periodically supports mostly hydrophytes, or the land is mostly saturated soil, or the land is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year.

The **wetland indicator** classification system represents the estimated probability of a species occurring in wetlands versus non-wetlands in a region of study.  It is defined in the `"1996 National List of Vascular Plant Species That Occur in Wetlands", U.S. Fish & Wildlife Service, National Wetlands Inventory, Branch of Habitat Assessment.` Branch of Habitat Assessment

The hierarchical **wetland attribute classification** system is defined in `"Classification of wetlands and deepwater habitats of the United States", L.M. Cowardin, V. Carter, F. Golet, and E. LaRoe, U.S. Fish Wildlife Service, 1979.` Full descriptions of each code is available at U.S. Fish Wildlife Service.

Threatened species are recognized as posing a potential loss to earth's biodiversity. `"The United States Federal Endangered Species Act of 1973", U.S. Fish and Wildlife Service` Endangered Species Act defines the terms "endangered", "threatened", and "rare".  State management agencies variously use additional terms including "sensitive" and "special concern" to further classify potentially threatened species.  This scheme is employed in the **FESA status** field.

UNEP World Conservation Monitoring Centre defines the classification system provided under the **IUCN Red List** field.  See the `"The 1994 IUCN Red List Categories", UNEP World Conservation Monitoring Centre,` IUCN Red List Categories.

The **noxious weed** rating system is based on various state management programs which rate plants based on their probability to be troublesome, aggressive, intrusive, detrimental, or destructive to agriculture, silviculture, or important native species, and difficult to control or eradicate.  The California Department of Food and Agriculture lists one such system.  For more details see California Department of Food and Agriculture.

An alternative ranking system for invasive weed management based on an analytic/numeric approach is the

"Handbook for Ranking Exotic Plants for Management and Control", Ronald D. Hiebert and James Stubbendieck, U. S. Department of the Interior, National Park Service, Natural Resources Publication Office, 1993. [Handbook for Ranking Exotic Plants](#)