

Notes on INTKEY interactive keys to the Western Australian Genera and Families of Flowering Plants

Amanda Spooner
Bioinformatics and Publications Group
Western Australian Herbarium

INTRODUCTION

This document introduces the initial screen and describes the set of specialised INTKEY icons created for the Key to Western Australian Families of Flowering Plants, the Key to Western Australian Genera of Flowering Plants and the Keys to Genera within individual Families of Flowering Plants. There are also notes on the occurrence of dependent characters.

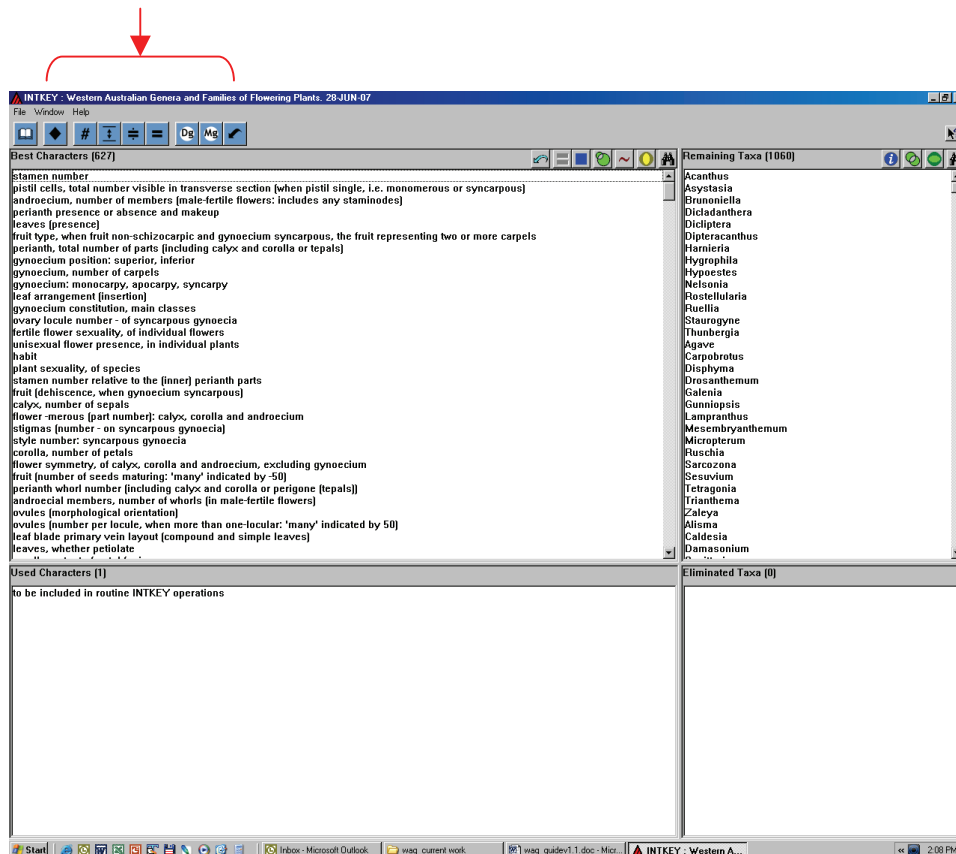
Explanations of the remaining icons, the DELTA INTKEY Icons, are dealt with in the online DELTA tutorial, which runs through an identification, using the DELTA Sample set.

This document is not a tutorial. We strongly recommend if you are a new user of DELTA INTKEY, that you take the time to study the online tutorial.

NOTES ON THE INTERACTIVE KEY

1. THE INITIAL INTKEY SCREEN

This is the first page of the INTKEY interactive key to the WESTERN AUSTRALIAN GENERA AND FAMILIES OF FLOWERING PLANTS. The screen below is displayed initially.



The button icons on the character and taxon panes have been discussed in the 'Sample' tutorial. However there are other icons in this key which have been added by the authors of the data set to allow extra functionality. A brief description of the icons is available by holding the cursor over the icon. For detailed information click on the 'help' icon on the far right side and then click on the icon for which you require extra information.

2. ICONS



This button accesses author information: in this case an introduction to the package and a list of references. Other information may be added so it is important to check here.



This button allows you to proceed with an identification by selecting a subset of the characters, and then selecting individual characters from that subset.



This button allows the user to turn the character and taxon numbers on or off. To turn the taxa and character numbers on click the icon and then select 'on'.

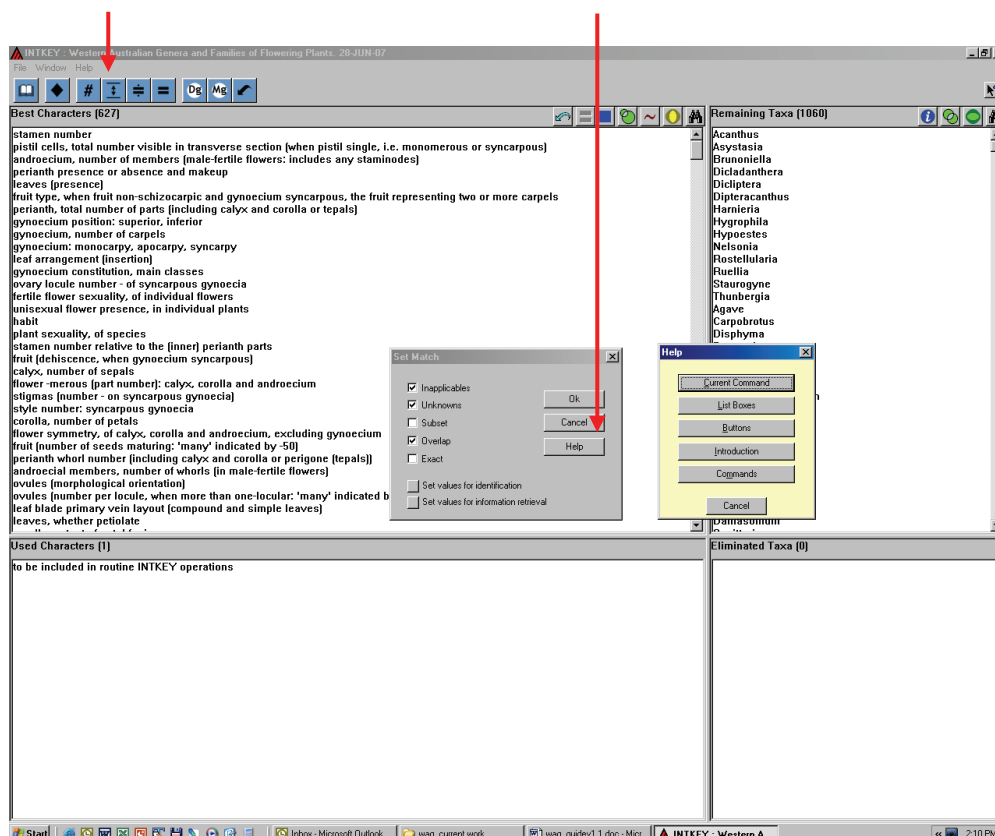


This button allows the user to set the diagnostic level, that is the number of differences that the program is required to try to find when a diagnosis of a taxon (or taxa) is requested using the Information button.



This button allows the program to be set to match the attributes entered for a taxon in ways appropriate for different purposes, identification and information retrieval. The usual setting is for identification, in which case the matching is less strict to take account of missing information.

For details, click on icon, and select 'help from the dialogue box. This displays a yellow 'Help' box. Choose 'current command'.



2. ICONS (CON'T.)



This button allows you to search for generic names, and cross-references those names accepted as taxonomically valid (and represented by descriptions in this package) with those treated here as synonyms. Note that searches may be complicated by minor variations in spelling, as well as by typographical errors. This is a 'work in progress' and some information has yet to be coded. If your query results in the following message, that is the case:

Sometimes included in (broad genus concept to which this genus is sometimes referred) not recorded.
Sometimes included in (broad family concept to which this family is sometimes referred (usually by Cronquist, 1981)) not recorded.



This button accesses a list of all the Dicot families within the data set. Use this feature to restrict your identification to genera within a family (or several families). The characters will be redetermined by the Intkey program to be those relevant to the chosen set of taxa. The original set of taxa will be restored after the Restart button is used



This button accesses a list of all the Monocot families within the data set. Use this feature to restrict your identification to genera within a family (or several families). The characters will be redetermined by the Intkey program to be those relevant to the chosen set of taxa. The original set of taxa will be restored after the Restart button is used



This button resets the set of available taxa to those that were available when the program was started from a FloraBase link. It is intended for use when the user has altered the set of available taxa with the Use a Subset of the Taxa button.

3. DEPENDENT CHARACTERS

Some characters which you will want to answer will be dependent on answers from other characters. These other characters are called 'controlling characters'. They are set to be answered automatically: e.g. select the first character of the 'best' set, 'stamen number,' and score it. A character denoting the presence of 'fertile stamens' has been automatically scored for you – see the red arrow. This will happen throughout the identification.

INTKEY - Western Australian Genera and Families of Flowering Plants: 28-JUN-07

File Window Help

Best Characters [501]

pistil cells, total number visible in transverse section [when pistil single, i.e. monomerous or syncarpous]
 perianth presence or absence and makeup
 fruit type, when fruit non-schizocarpic and gynoecium syncarpous, the fruit representing two or more carpels
 leaves [presence]
 leaf arrangement [insertion]
 gynoecium position: superior, inferior
 perianth, total number of parts [including calyx and corolla or tepals]
 fertile flower sexuality, of individual flowers
 unisexual flower presence, in individual plants
 ovary locule number - of syncarpous gynoecia
 gynoecium constitution, main classes
 gynoecium: monoecy, apocary, syncary
 gynoecium, number of carpels
 plant sexuality, of species
 fruit [dehiscence, when gynoecium syncarpous]
 habit
 androecium, number of members [male-fertile flowers: includes any staminodes]
 stigmas [number - on syncarpous gynoecia]
 calyx, number of sepals
 style number: syncarpous gynoecia
 fruit [number of seeds maturing: 'many' indicated by -50]
 flower symmetry, of calyx, corolla and androecium, excluding gynoecium
 perianth whorl number [including calyx and corolla or perigone [tepals]]
 ovules [morphological orientation]
 ovules [number per locule, when more than one-locular: 'many' indicated by 50]
 corolla, number of petals
 flower-merous [part number]: calyx, corolla and androecium
 stamen number relative to the [inner] perianth parts
 anther locule number [fertile anthers]
 leaves, whether stipuled
 corolla folding in bud
 ovary locule number class - in syncarpous gynoecia

Used Characters [3]

to be included in routine INTKEY operations
 fertile stamen presence present
 stamen number 4 stamens

Remaining Taxa [260]

Acanthus
 Asystasia
 Brunoniella
 Dipteracanthus
 Hygrophila
 Ruellia
 Staurogyne
 Thunbergia
 Gunniopsis
 Tetragonia
 Achyranthes
 Alternanthera
 Amaranthus
 Ptilotus
 Parsonsia
 Allocasia
 Amorphophallus
 Pistia
 Typhonium
 Aristolochia
 Asteraceae
 Avicennia
 Batis
 Dolichandrone
 Pandorea
 Cardamine
 Coronopus
 Lepidium
 Rorippa
 Buddleja
 Cadaba
 Cleome

Eliminated Taxa [800]

(1) Diclidanthera
 (1) Diclptera
 (1) Hamieria
 (1) Hypoestes
 (1) Nelsonia
 (1) Rostellularia
 (1) Agave
 (1) Carpobrotus
 (1) Disphyma
 (1) Drosanthemum
 (1) Galenia
 (1) Lampranthus
 (1) Mesembryanthemum
 (1) Micropterum
 (1) Ruschia
 (1) Sarcozona
 (1) Sesuvium
 (1) Trianthema
 (1) Zaleya
 (1) Alisma
 (1) Caldecia

Taskbar: Start, Internet Explorer, Outlook, wag_current work, wag_guidev1.1.doc - Mic..., INTKEY - Western A..., 2:12 PM