V.Ģ.Balodis vbalodis@lanet.lv

4. laboratorijas darbs:

noteicēji

noteicēju veidi

dihotomie noteicēji

Jean Baptiste Pierre Antoine
de Monet de Lamarck (1744—1829)

Walters, Keil. Vascular Plant Taxonomy

KEY 1—PLANTS REPRODUCING BY SPORES FERNS AND FERN ALLIES

1. Leaves one-veined, linear to oblong or scale-like or completely absent.
   2. Plants free-floating or stranded on mud, very small. ..... SALVINIACEAE—p. 103
   2' Plants not floating, epiphytic or anchored in wet to dry soil.
      3. Leaves apparently absent or reduced to veinless scales, roots absent; stems elongate, slender, dichotomously branched with scattered 3-lobed sporangia. ..... PSILOTACEAE—p. 97
      3' Leaves and roots present; sporangia not borne on naked dichotomous stems.
         4. Leaves all basal, linear
            5. Plants with creeping rhizomes, often bearing swollen sporocarps; leaves with circinate vernation. ..... MARSILEACEAE—p. 102
            5' Plants with corm-like bases, never rhizomatous; leaves never circinate
         4' Leaves cauline, scalelike.
            6. Stems hollow, jointed, with connate whorled scale leaves; sporangia borne on the undersurface of peltate sporangiophores in terminal cones ..... EQUISETACEAE—p. 105
            6' Stems solid, not jointed; leaves alternate or opposite; sporangia borne in axils of fertile leaves (sporophylls), often aggregated into cone-like groups.
               7. Sporangia all similar, producing only one kind of spore; ligule absent. ..... LYCOPODIACEAE—p. 97
               7' Sporangia of two kinds, some producing 4 megaspores, others producing numerous microspores; ligule present in leaf axils but often extremely small and difficult to observe. ..... SELAGINELLACEAE—p. 107

1' Leaves with numerous veins, well developed, entire to several times compound.
   8. Plants aquatic, either rooting or free-floating.
      9. Leaves pinnately divided or 1x -4x pinnate. ..... PARKERIACEAE—p. 100
      9' Leaves palmate with 4 leaflets. ..... MARSILEACEAE—p. 102
   8' Plants terrestrial or epiphytic, always rooted.
      10. Leaves strongly dimorphic, the fertile fronds or fertile portions of the fronds sharply different from the sterile fronds or portions of the fronds.
         11. Sterile leaves linear, grass-like without expanded blades. ..... SCHIZAEACEAE—p. 99
         11' Sterile leaves with expanded, often lobed or compound blades.
            12. Leaves indeterminate with twining rachises. ..... LYGODIACEAE—p. 99
            12' Leaves determinate, never twining.
               13. Sporangia 0.5-1 mm diameter, spherical, or pear-shaped, sessile.
                  14. Sporangia pear-shaped, ca. 0.5 mm diameter; annulus present, subapical, forming a complete ring around the sporangium; sporangia borne in long-stalked clusters, these either arising in pairs below the sterile portion of the frond or on slender fertile fronds completely separate from the sterile fronds. ..... ANEMIACEAE—p. 100
                  14' Sporangia spherical, 0.5–1 mm diameter; annulus absent; sporangia borne variously in stalked clusters arising singly from the bases of sterile portion of the fronds, on terminal fertile pinnae, on fertile pinnae placed between upper and lower sterile pinnae, or on stout fertile fronds completely separate from the sterile fronds.
                     15. Fronds mostly solitary, generally 1–40 cm long, arising from a short stem with a fascicle of fleshy roots; sporangia in a spike-like or panicle-like cluster on a specialized stalk arising from the petiole below the sterile portion of the frond. ..... OPHIOGLOSSACEAE—p. 99

aprakstošie noteicēji

Bo Mossberg Den nordiska floran

I Fria foderblad eller lite hopväxta vid basen. Utan stipler. Blommor vita.

Arenaria 2 stift. Kapsel med kluvna tänder. Frön utan bihang. 5 arter. s **98**

Moehringia 2 stift. Kapsel med 4 tänder. Frön med bihang. 2 arter. s **95**

Minuartia 3 stift. Kapsel avlång med 3 tänder. 4 arter. s **96**

Honkenya 3 stift. Kapsel klotrund med 3 tänder. Köttig havsstrandväxt. 1 art. s **97**

Stellaria 3 stift. Kapsel med 6 tänder 15 arter. s **97**
1–4, 6 Nedre blad skaftade. 5, 7–15, nedre blad oskaftade.
5, 11, 13–15 Stödblad gröna. 6–10, 12 stödblad hinnkantade.

Holosteum Blommor i flocklikt knippe. Kronblad tandade. 3 ståndare. 1 art. s **101**

Cerastium Kronblad inskurna till 30 %. Kapsel cylindrisk, vanligen böjd, med 10 (8) små tänder. 10 arter. s **102**
1–5 Fleråriga arter som växer i glesa mattor.
6–10 1-åriga arter som saknar sterila bladskott vid basen.

Myosoton 5 stift. Kapsel med 5 kluvna tänder. 1 art. s **105**

Sagina 4–5 stift. Kapsel med 4–5 hela tänder. 9 arter. s **106**

Scleranthus 2 stift. Utan kronblad. Frukt öppnas ej. 2 arter. s **108**

II Med stipler. Foderblad fria.

Corrigiola Strödda blad. Frukt nöt. 1 art. s **108**

Herniaria Krypande. Blad motsatta, upptill strödda. Foder tydligt. 1 märke 1 art. s **108**

Illecebrum Krypande. Blad motsatta. Foderblad svampiga, lysande vita. Frukt nöt. 1 art. s **108**

Spergula Blad i krans. Stift 5. 2 arter. s **109**

Spergularia Blad i krans med hopväxta stipler. Stift 3. 3 arter. s **110**

III Foder hopväxta till ett rör.

Lychnis Fodertänder korta. 5 stift. Kapseltänder hela. 3 arter. s **110**

Agrostemma Foder djupt flikat. 5 stift. Kapseltänder 5. 1-årig. 1 art. s **110**

Silene 3 eller 5 stift. Kapseltänder kluvna, dubbelt så många som stiften. 18 arter. s **112**

Gypsophila 2 stift. Foder klocklikt. Kronblad killikt avsmalnande. 3 arter. s **117**

Saponaria 2 stift. Foder rörlikt. Krona med bikronblad. 1 art. s **117**

Vaccaria 2 stift. Foderrör med 5 vingar. 1 art. s **117**

Petrorhagia Foderrör helt omslutet av stora hylslika blad. 2 arter. s **117**

Dianthus Foderrör med hylslika blad vid basen. 5 arter. s **118**

Collins Pocket Guide. Wild Flowers

The Main Key

(N.B. Composites, actually tight heads of small flowers, also have a separate key, pp. 240-1)

INDIVIDUAL FLOWERS LARGE OR CONSPICUOUS

Open, star-like or saucer-shaped flowers

Two petals


Enchanter's Nightshades **158**


Goldilocks Buttercup **74**

Three petals


Mossy Stonecrop **106**, Water Plantains, Star-fruit, Arrow head, Frogbit, Water Soldier **270**


Ranunculus hyperbereus **72**, Goldilocks Buttercup **74**, Rannoch Rush **232**


Water Plantains **270**


Water Plantains **270**

Four petals


Bastard Toadflaxes **38**, Mossy Sandwort **52**, Water Tillaea **106**, Dwarf cornel **164**, Squinancywort, Woodruff **194**, Bedstraws, Cleavers **196**


Cranberry **182**, Squinancy-wort **194**, Slender Marsh Bed-straw **196**


Wall Bedstraw **196**


Crosswort, Lady's Bedstraw **196**


Spurge Laurel **146**, False Cleavers, Wall Bedstraw **196**, Herb Paris **280**


Blue Woodruff **194**


Mezereon **146**, Dwarf Cornel **164**, Field Madder **194**


Pearlworts **60**, Crucifers **86**, Allseed **140**, Water Chestnut **270**, May Lily **272**


Poppies, Red-horned Poppy **84**, *Capsella rubella* **100**, Garden Cress **102**


Red-horned Poppy **84**, Wall-flower **90**


Poppies, Greater Celandine **84**, Crucifers **86**, Tormentil **118**, Evening Primroses **158**, Yellow Centauries **190**


Mistletoe **38**, Pearlworts **60**, Narrow-leaved Pepperwort **102**, Golden Saxifrages **104**


Opium Poppy **84**, Crucifers **86**


Meadow-rues, *Clematis recta*, Baneberry, **76**, Shore-weed **302**


Lesser Meadow-rue **76**, Rose-root **104**


Traveller's Joy **76**


Meadow-rues, Alpine Clema-tis **76**


Crucifers **86**, Willowherbs **160**


Willowherbs **160**

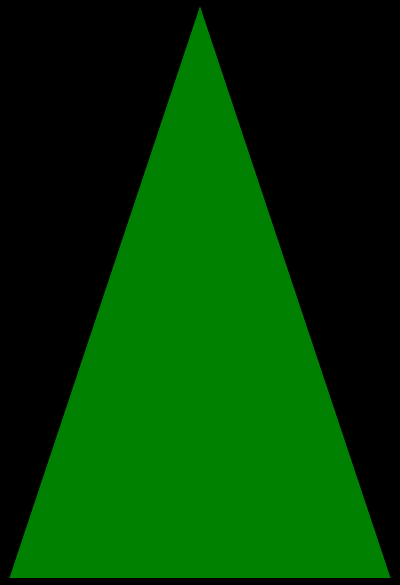
politomie noteicēji

SLIKS

Stinger's Lightweight Interactive Key Software

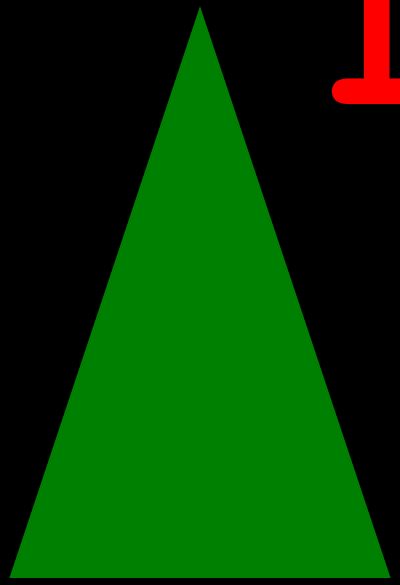
http://www.stingersplace.com/SLIKS/

Programmu pakete DELTA



DELTA

DEscription Language for TAxonomy



Amphipoda: Families

J.K. Lowry & R.T. Springthorpe

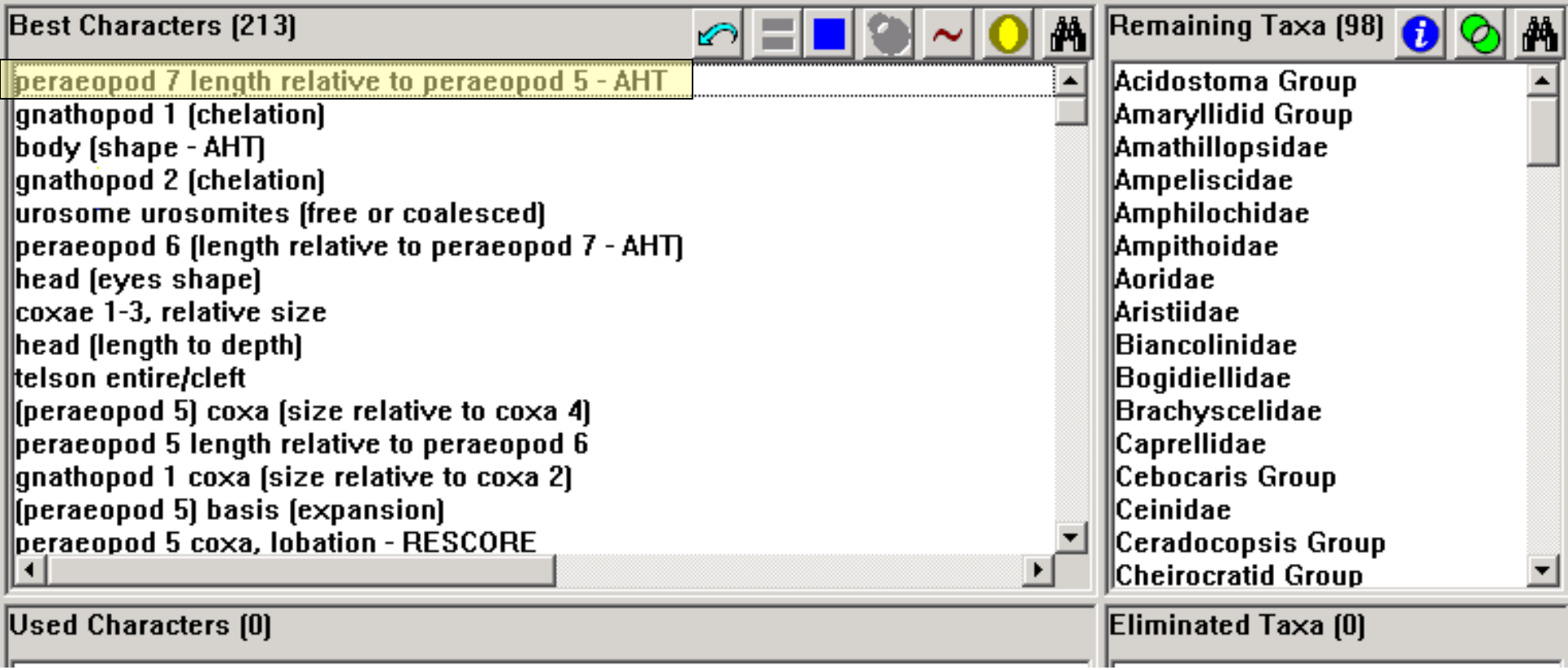
If Intkey (dated 5 September 2000 or later) is already installed on your computer, click **here** to open this dataset.

For identification and information retrieval, you need the program **Intkey** and data files. You must download and install **Intkey** first. It is recommended that you install the current version of **Intkey** as earlier versions will lack some features.

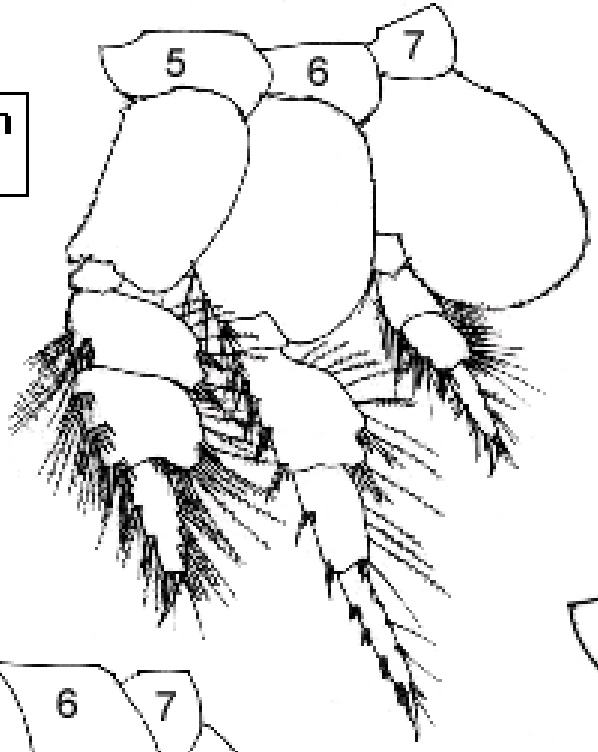
You must have Windows 95/98/ME, NT or 2000. Using these platforms, **Intkey** can read the data files from the Internet, and afterwards save them on your hard disk if you wish.

Netscape does not work so please use **Microsoft Internet Explorer**.

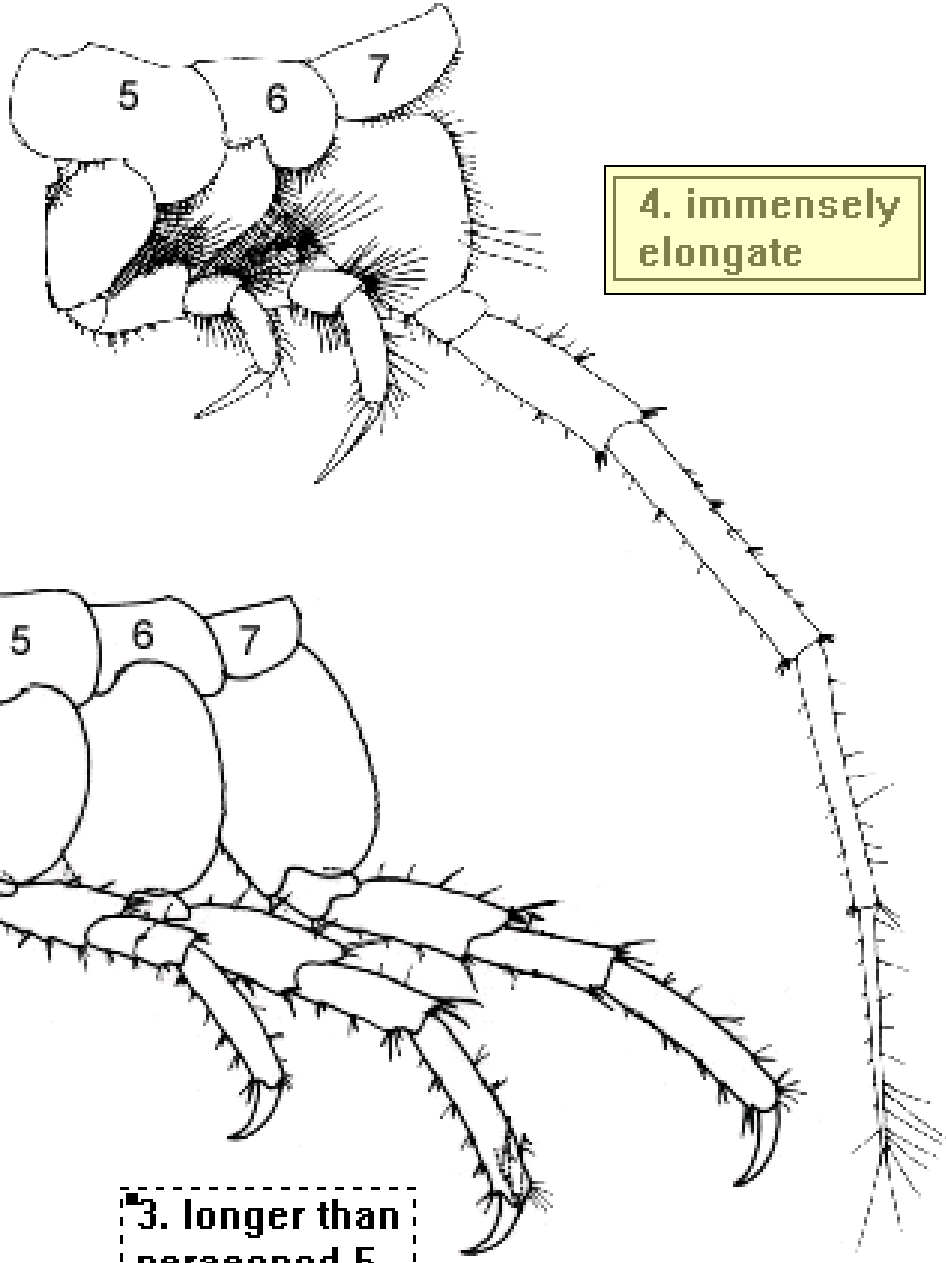
If you are unsure how to use the program, go to "How to use Interactive Keys"


Best Characters (213)
peraeopod 7 length relative to peraeopod 5 - AHT
gnathopod 1 (chelation)
body (shape - AHT)
gnathopod 2 (chelation)
urosome urosomites (free or coalesced)
peraeopod 6 (length relative to peraeopod 7 - AHT)
head (eyes shape)
coxae 1-3, relative size
head (length to depth)
telson entire/cleft
(peraeopod 5) coxa (size relative to coxa 4)
peraeopod 5 length relative to peraeopod 6
gnathopod 1 coxa (size relative to coxa 2)
(peraeopod 5) basis (expansion)
peraeopod 5 coxa, lobation - RESCORE
Remaining Taxa (98)
Acidostoma Group
Amaryllidid Group
Amathillopsidae
Ampeliscidae
Amphilochidae
Ampithoidae
Aoridae
Aristiidae
Biancolinidae
Bogidiellidae
Brachyscelidae
Caprellidae
Cebocaris Group
Ceinidae
Ceradocopsis Group
Cheirocratid Group
Used Characters (0)
Eliminated Taxa (0)

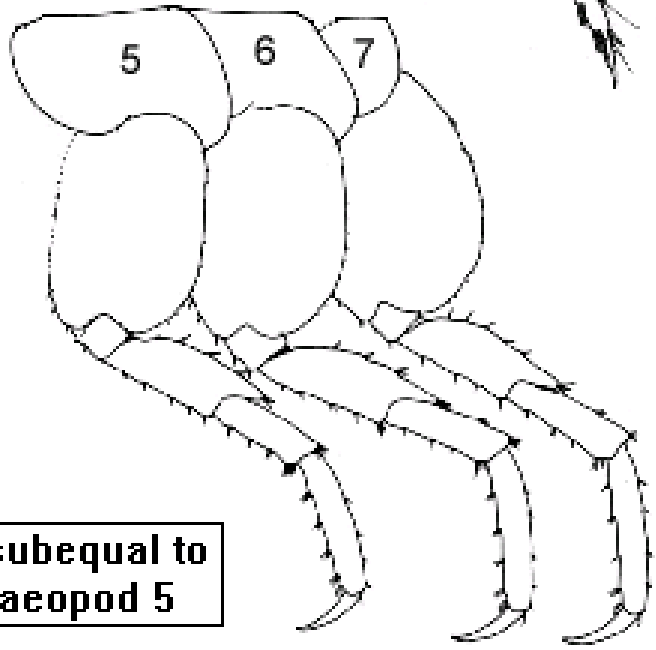
Peraeopod 7



1. shorter than peraeopod 5

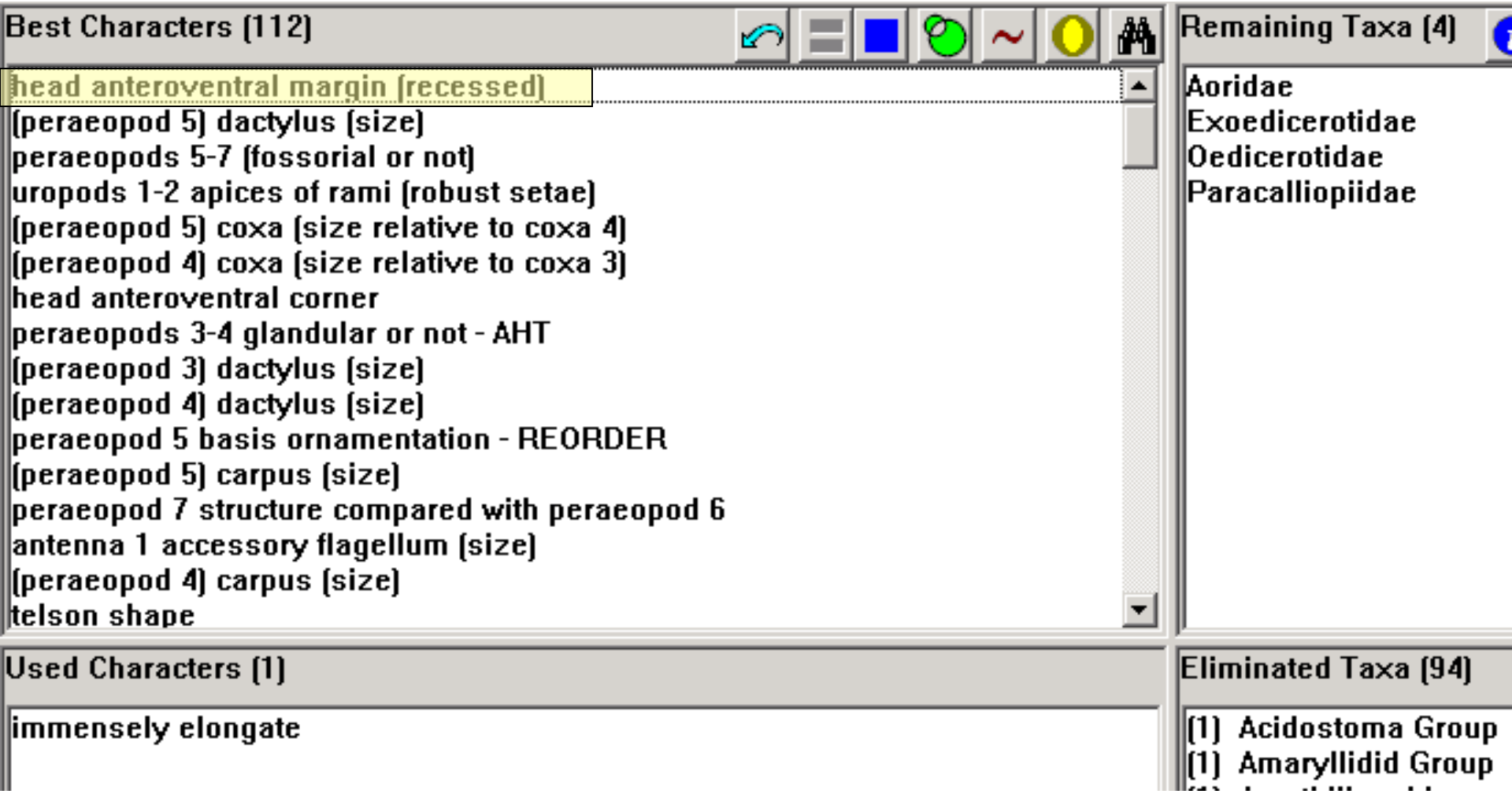


4. immensely elongate

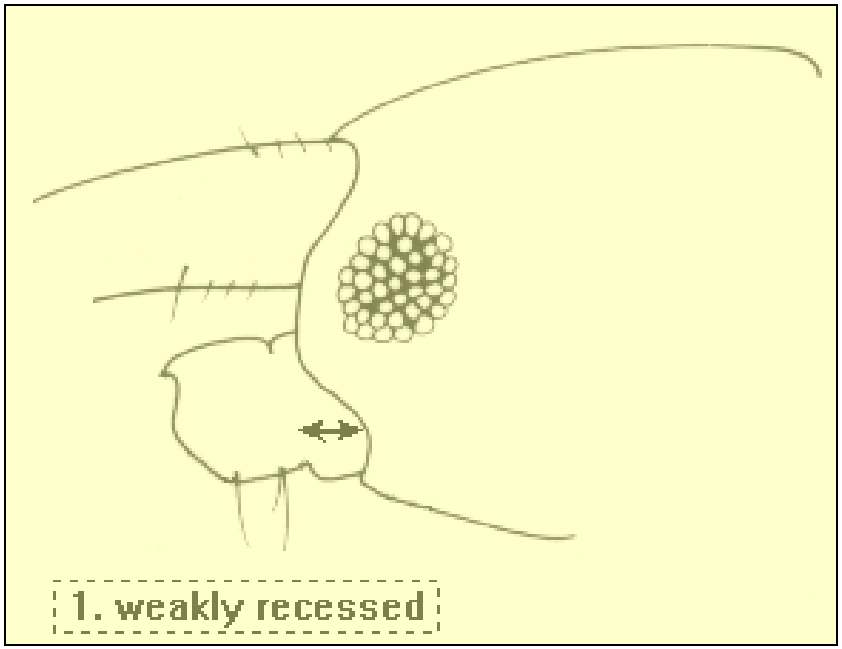


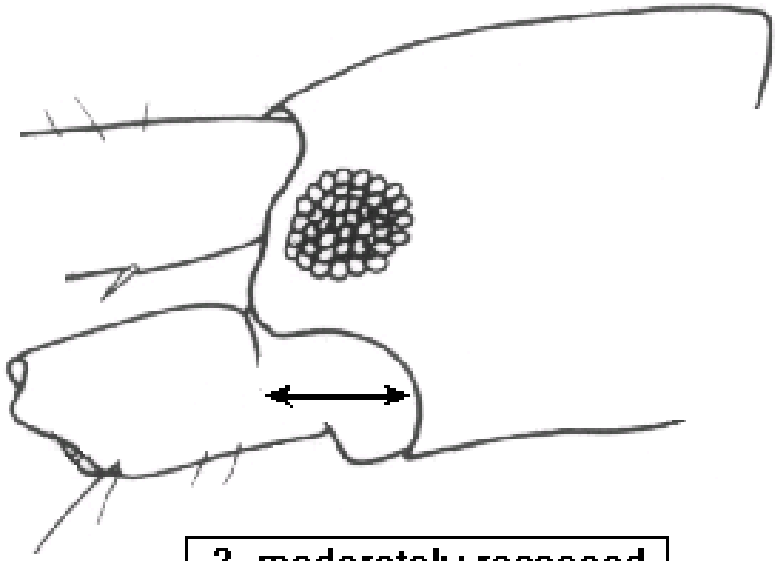
2. subequal to peraeopod 5

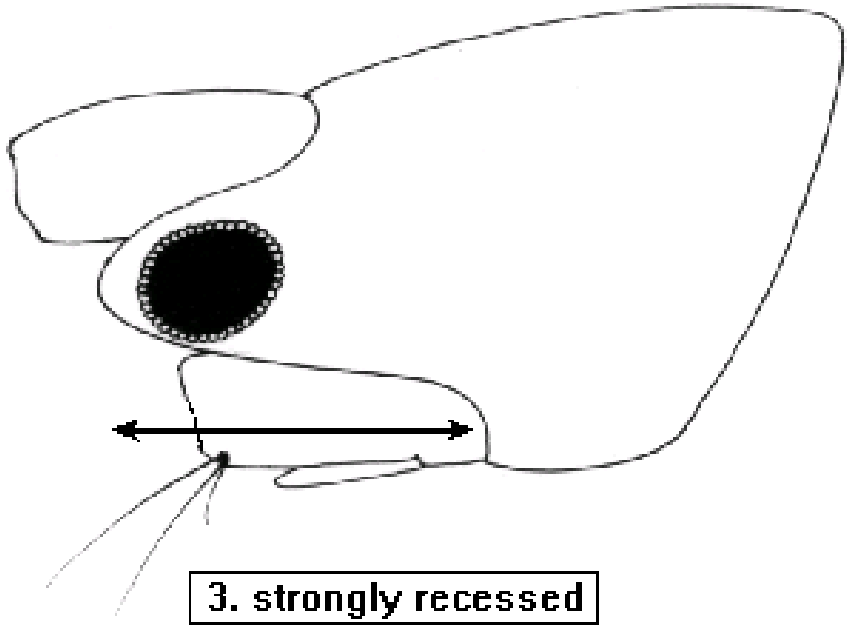
3. longer than peraeopod 5

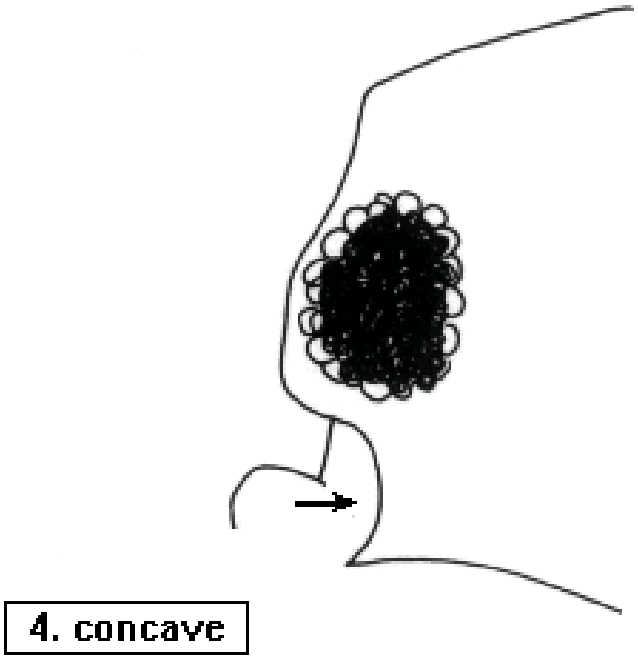

Best Characters (112)
head anteroventral margin (recessed)
(peraeopod 5) dactylus (size)
peraeopods 5-7 (fossorial or not)
uropods 1-2 apices of rami (robust setae)
(peraeopod 5) coxa (size relative to coxa 4)
(peraeopod 4) coxa (size relative to coxa 3)
head anteroventral corner
peraeopods 3-4 glandular or not - AHT
(peraeopod 3) dactylus (size)
(peraeopod 4) dactylus (size)
peraeopod 5 basis ornamentation - REORDER
(peraeopod 5) carpus (size)
peraeopod 7 structure compared with peraeopod 6
antenna 1 accessory flagellum (size)
(peraeopod 4) carpus (size)
telson shape
Remaining Taxa (4)
Aoridae
Exoedicerotidae
Oedicerotidae
Paracalliopiidae
Used Characters (1)
immensely elongate
Eliminated Taxa (94)
(1) Acidostoma Group
(1) Amaryllidid Group

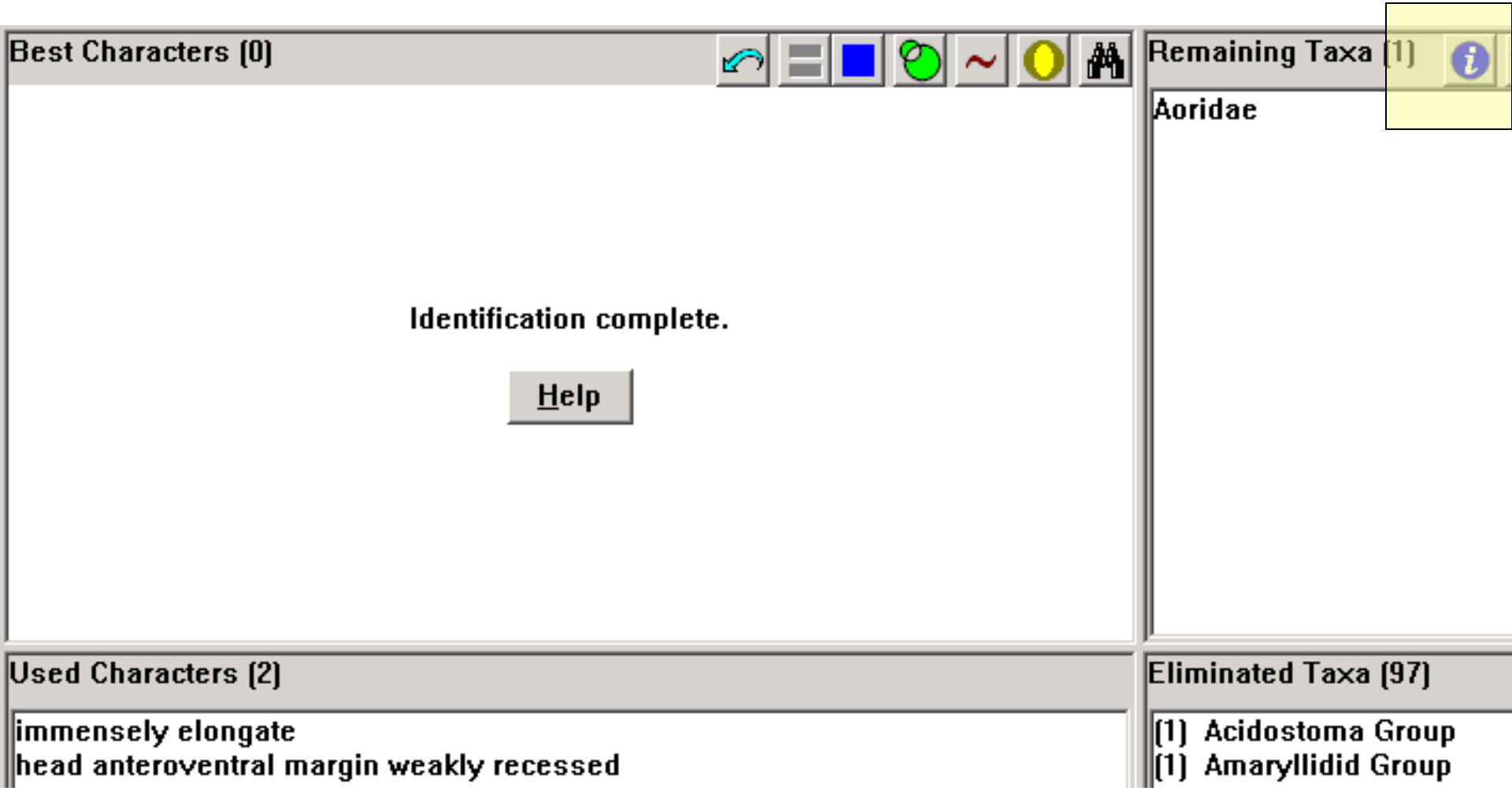
Head, anteroventral margin

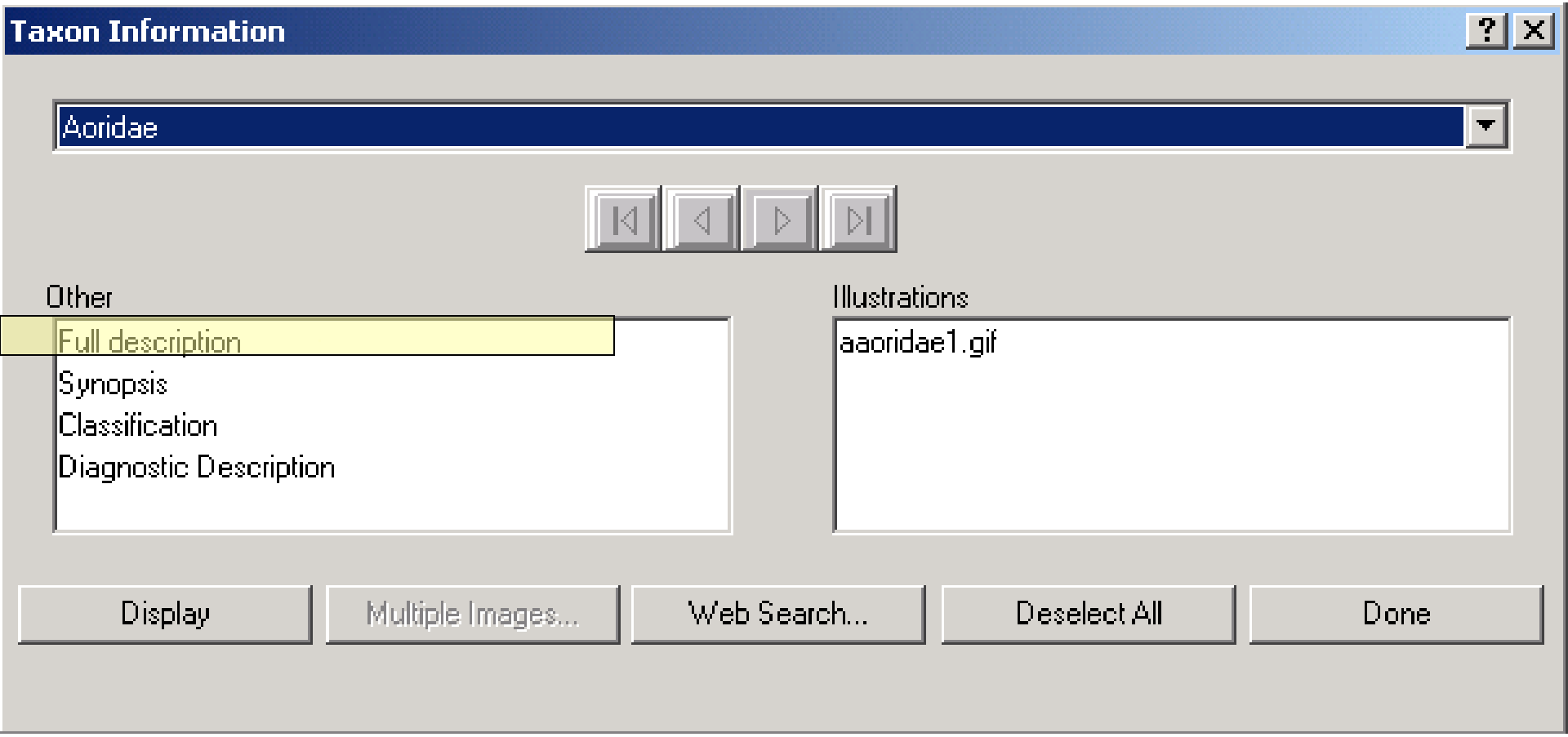









Best Characters (0)
Identification complete.
Help
Remaining Taxa (1)
Aoridae
Used Characters (2)
immensely elongate
head anteroventral margin weakly recessed
Eliminated Taxa (97)
(1) Acidostoma Group
(1) Amaryllidid Group


Taxon Information
Aoridae
Other
Full description
Synopsis
Classification
Diagnostic Description
Illustrations
aaoridae1.gif
Display
Multiple Images...
Web Search...
Deselect All
Done

Full description

File Edit Window

Aoridae Stebbing, 1899

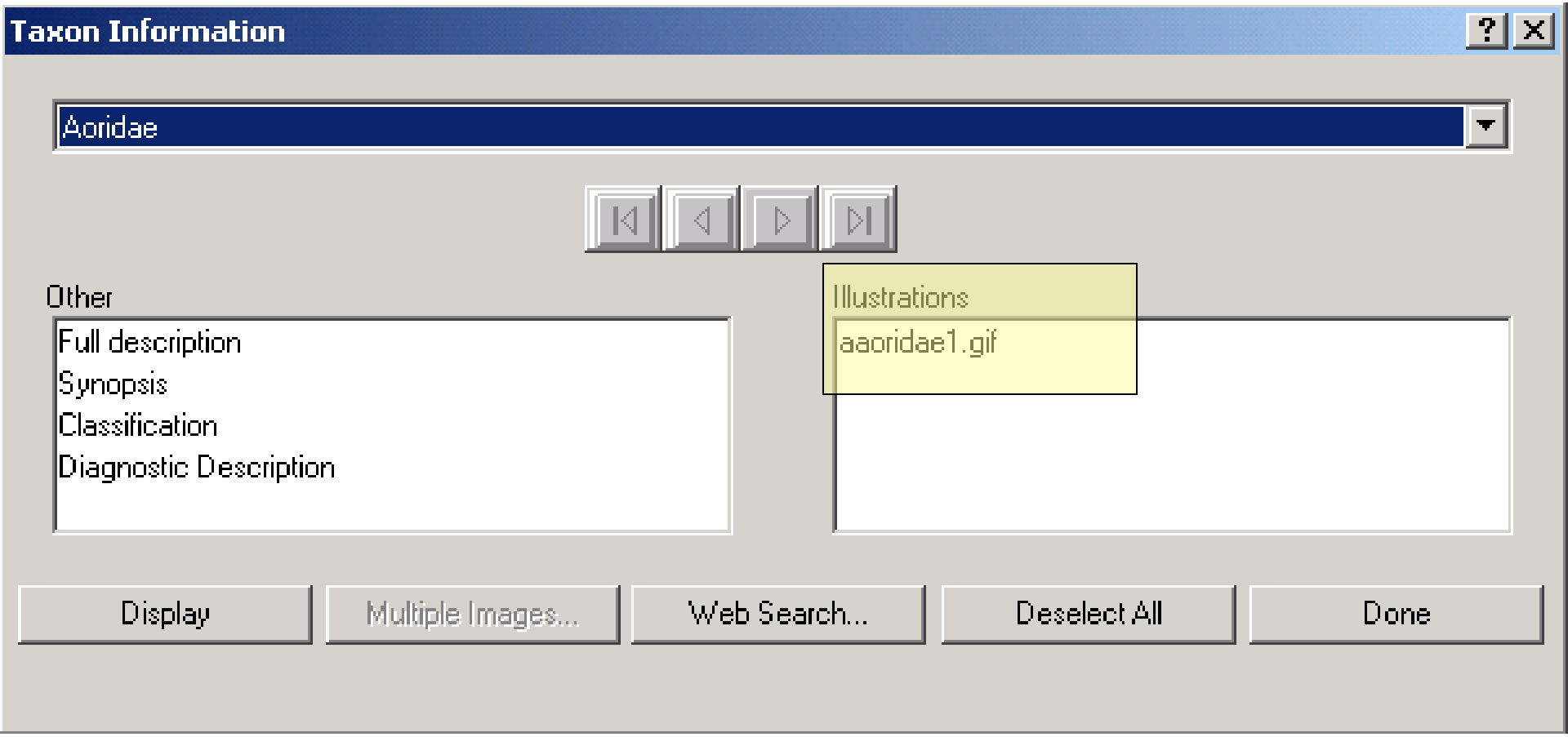
Description. ***Head*** free, not coalesced with peraeonite 1; exposed; as long as deep, or longer than deep; ***anteroventral margin weakly recessed or moderately recessed or concave or oblique***, anteroventral margin deeply excavate or shallowly excavate or moderately excavate, anteroventral corner rounded or subquadrate or hooked; rostrum present or absent, short; eyes present, well developed or obsolescent, or absent; not coalesced; 1 pair; not bulging. ***Body laterally compressed, or subcylindrical***; cuticle smooth.

Antenna 1 subequal to antenna 2, or longer than antenna 2; peduncle with sparse robust and slender setae; 3-articulate; peduncular article 1 shorter than article 2, or subequal to article 2, or longer than article 2; ***antenna 1 article 2 longer than article 3***; peduncular articles 1-2 not geniculate; accessory flagellum present, or absent; callynophore absent. *Antenna 2* present; short, or medium length, or long; articles not folded in zigzag fashion; without hook-like process; flagellum shorter than peduncle; less than 5-articulate, or 5 or more articulate; not clavate; *calceoli* absent.

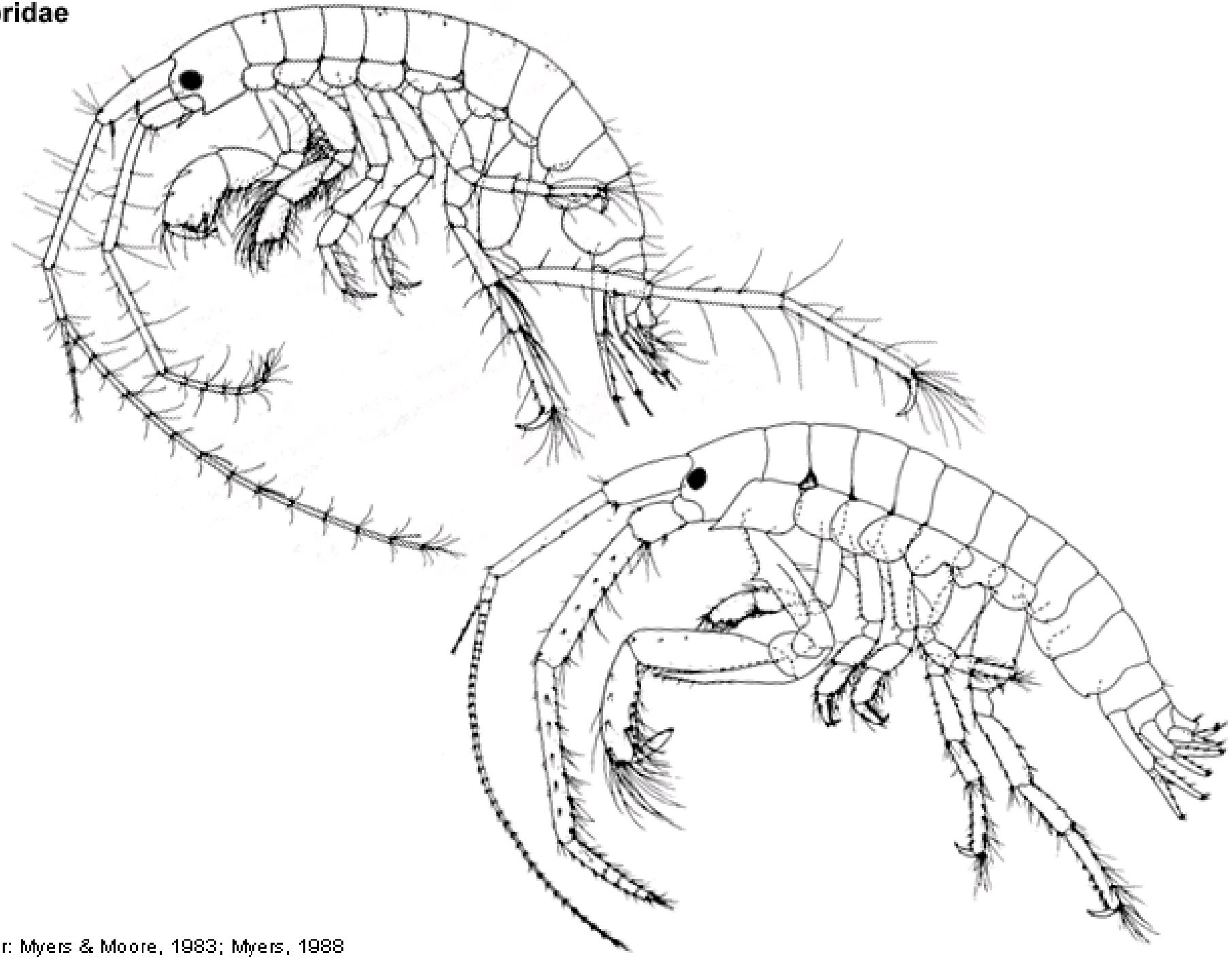
Mouthparts well developed. *Mandible* incisor dentate; lacinia mobilis present on both sides; accessory setal row without distal tuft; molar present, small or medium, triturative; palp present or absent. *Maxilla 1* present; inner plate present, strongly setose along medial margin or weakly setose apically; palp present, not clavate. *Maxilla 2* inner plate present; outer plate present. *Maxilliped* inner and outer plates well developed or reduced, palps present, well developed or reduced; inner plates well developed, separate; outer plates present, large or small; palp 4-articulate, article 3 without rugosities. ***Labium smooth***.

Peraeon. Peraeonites 1-7 separate; complete; sternal gills absent; pleurae absent.

Coxae 1-7 well developed or reduced, none fused with peraeonites. *Coxae 1-4* longer than broad or as long as


Taxon Information
Aoridae
Other
Full description
Synopsis
Classification
Diagnostic Description
Illustrations
aaoridae1.gif
Display
Multiple Images...
Web Search...
Deselect All
Done

Aoridae



After: Myers & Moore, 1983; Myers, 1988

The Families of British Non-marine Molluscs (Slugs, Snails and Mussels)

L. Watson and M. J. Dallwitz

Contents

Descriptions

These descriptions were generated from a DELTA database (Dallwitz 1980; Dallwitz, Paine, and Zurcher 1993). The bold parts are diagnostic descriptions, generated with the aid of Intkey (Dallwitz *et al.* 1993). They distinguish most taxa in at least one respect from the other taxa.

British Non-marine Molluscs: Families

L. Watson and M. J. Dallwitz

Helicidae

Morphology. Snails, with a conspicuous, spiral, univalve shell.

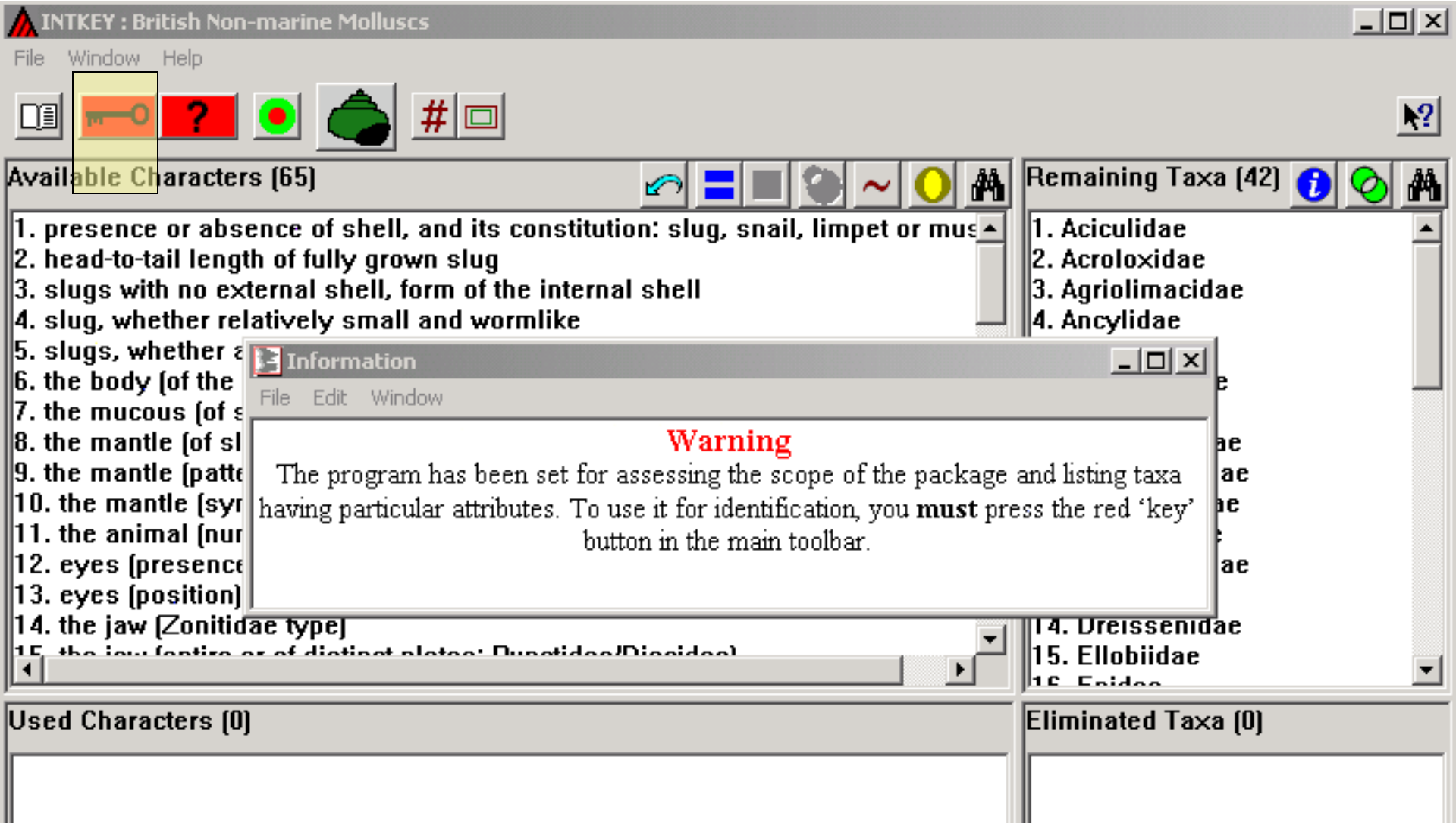
The animal with two pairs of tentacles. Eyes at the tips of the posterior tentacles.

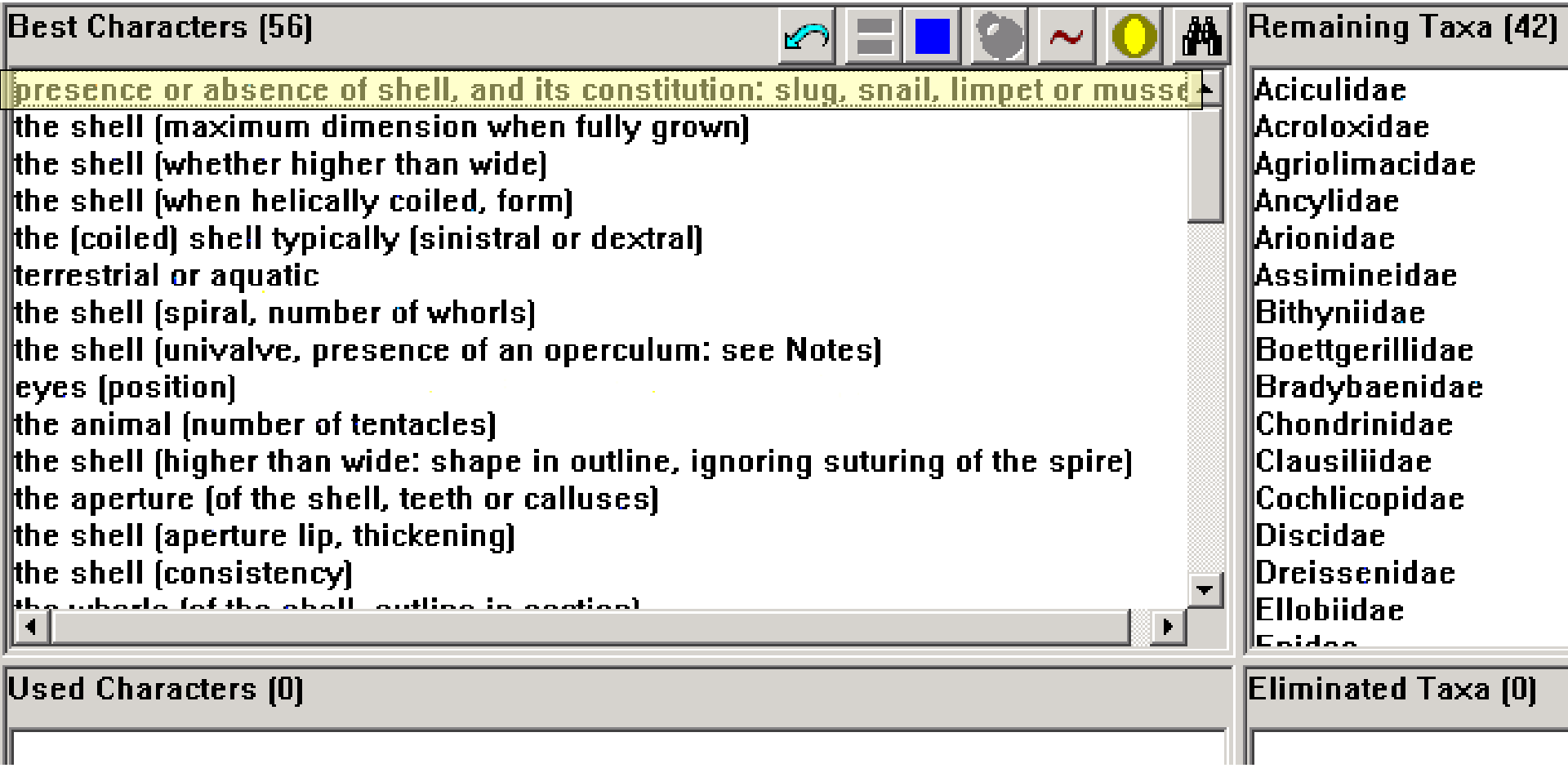
The shell inoperculate; planispiral (*Helicodonta*), or rising-spiral (the rest, but some discoid, with the spire scarcely raised); (4–)5–7 whorled (mostly), or 8–10 whorled; **typically dextral**; **(5–)6–40 mm in its maximum dimension (wide), or 10–25(–40) mm in its maximum dimension (high)**; higher than wide (conspicuously so only in *Cochlicella*), or about as high as wide (more or less,in *Trochoidea elegans*, *Helix aspersa*, *H. pomatia* and *Arianta arbustorum*), or wider than high (mostly, at least somewhat); 3.5–50 mm high; 5–50 mm wide (the measurements and proportions reflecting great variation in sizes and shapes among, and sometimes within, the genera); **height about 0.45 x the width (*Helicodonta*), or 0.59–1 x the width (mostly), or 1.8–2 x the width (*Cochlicella*)**; with the body whorl predominating and the spire small and short, or high-spired and tapered gradually from the body whorl. The height of the spire about 0.09–0.32 x that of the shell (mostly), or 0.57–0.66 x that of the shell (*Cochlicella*), or inapplicable to the planispiral in *Helicodonta*. The spire acute (in *Cochlicella*), or obtuse (mostly). The shell when not or scarcely higher than wide, discoid (in *Helicella*, and more or less so in *Helicogona lapicida*), or conical (in *Trochoidea elegans* and *Cochlicalla barbara*), or cochleate (most commonly), or subglobose to globose (in *Helix aspersa* and *H. pomatia*); when markedly higher than wide, i.e. in *Cochlicella*, tear-shaped, or turretiform; shallowly sutured, or deeply sutured, or shallowly sutured to deeply sutured. The whorls neither shouldered nor keeled (mostly), or shouldered (*Perforatella subrufescens*), or keeled (*Trochoidea*, *Hygromia*, *Helicogona*); conspicuously and regularly transversely ridged, or not conspicuously transversely ridged. The aperture with neither teeth nor calluses. **The shell with an umbilicus**. **The shell thick-lipped**; opaque; variously white, yellow, pink, horn-coloured, or brown; conspicuously colour-patterned (often strikingly banded along or occasionally across the whorls), or plain.

Morphological comments. Species of several (or all?) the genera produce "darts" associated with courtship rituals. These exhibit characteristic shapes and sculpting, for example providing ready means of distinguishing *C. hortensis* from *C. nemoralis* (see illustrations).

General biology, ecology. Terrestrial. Mostly in dry, sunny, open, especially calcareous places, in quarries, stone walls, hedgerows, waste ground, gardens, etc.; but a few confined to moist and sheltered or marshy places, or woodland. Hermaphrodite.

Classification. Gastropoda; Pulmonata.


INTKEY : British Non-marine Molluscs
File Window Help
Available Characters (65)
1. presence or absence of shell, and its constitution: slug, snail, limpet or mus
2. head-to-tail length of fully grown slug
3. slugs with no external shell, form of the internal shell
4. slug, whether relatively small and wormlike
5. slugs, whether a
6. the body (of the
7. the mucous (of s
8. the mantle (of sl
9. the mantle (patte
10. the mantle (syr
11. the animal (nur
12. eyes (presence
13. eyes (position)
14. the jaw (Zonitidae type)
Information
File Edit Window
Warning
The program has been set for assessing the scope of the package and listing taxa having particular attributes. To use it for identification, you must press the red 'key' button in the main toolbar.
Remaining Taxa (42)
1. Aciculidae
2. Acroloxidae
3. Agriolimacidae
4. Ancylidae
14. Dreissenidae
15. Ellobiidae
Used Characters (0)
Eliminated Taxa (0)


Best Characters (56)
presence or absence of shell, and its constitution: slug, snail, limpet or musse
the shell (maximum dimension when fully grown)
the shell (whether higher than wide)
the shell (when helically coiled, form)
the (coiled) shell typically (sinistral or dextral)
terrestrial or aquatic
the shell (spiral, number of whorls)
the shell (univalve, presence of an operculum: see Notes)
eyes (position)
the animal (number of tentacles)
the shell (higher than wide: shape in outline, ignoring suturing of the spire)
the aperture (of the shell, teeth or calluses)
the shell (aperture lip, thickening)
the shell (consistency)
Remaining Taxa (42)
Aciculidae
Acroloxidae
Agriolimacidae
Ancylidae
Arionidae
Assimineidae
Bithyniidae
Boettgerillidae
Bradybaenidae
Chondrinidae
Clausiliidae
Cochlicopidae
Discidae
Dreissenidae
Ellobiidae
Used Characters (0)
Eliminated Taxa (0)

Select state or states

presence or absence of shell, and its constitution: slug, snail, limpet or mussel

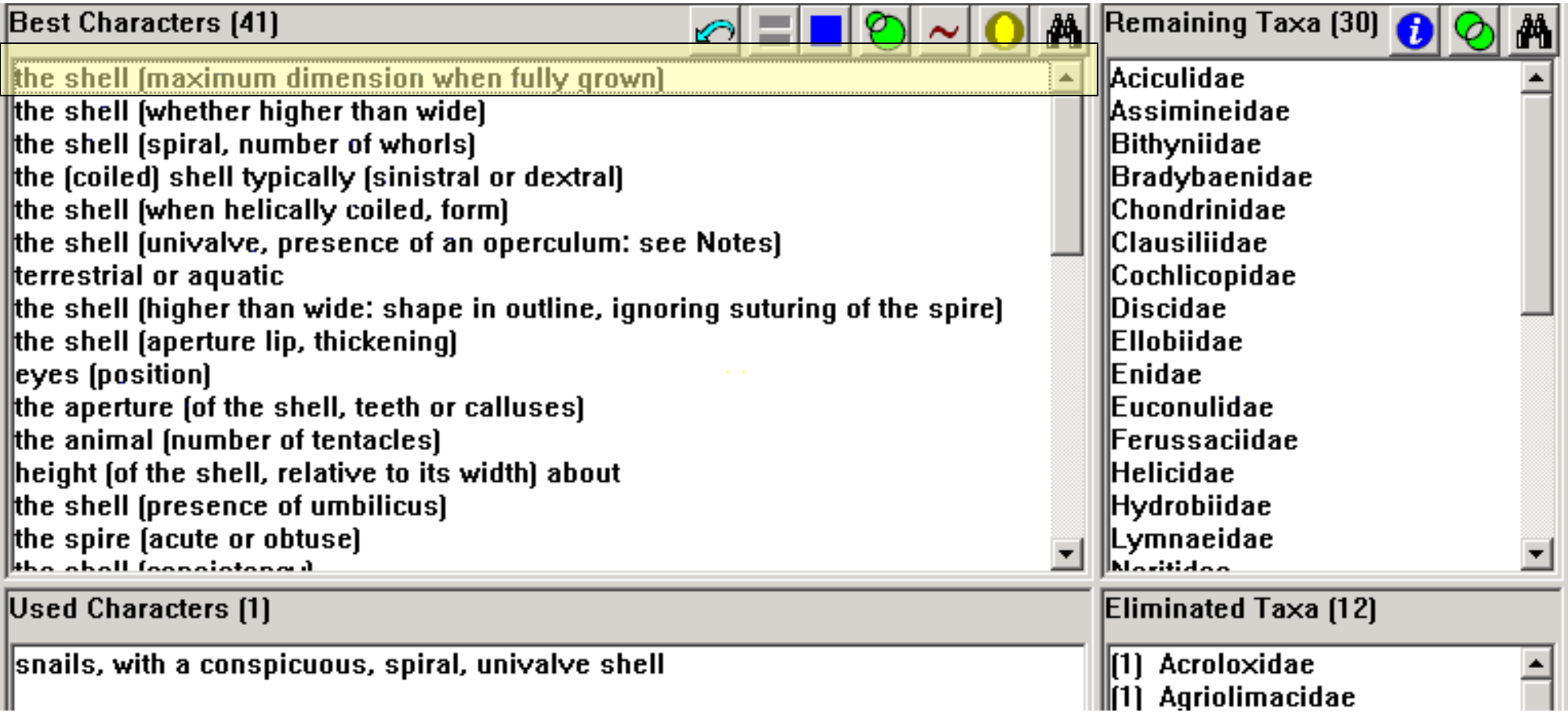
snails, with a conspicuous, spiral, univalve shell (this serving as a shelte
limpets, with a conspicuous, protective patelliform shell bearing only a ve
slug-like, but with a small, posterior external shell covering the mantle (th
slugs, with no external shell
mussels, enclosed by a hinged, bivalve shell (the animals lacking a deve

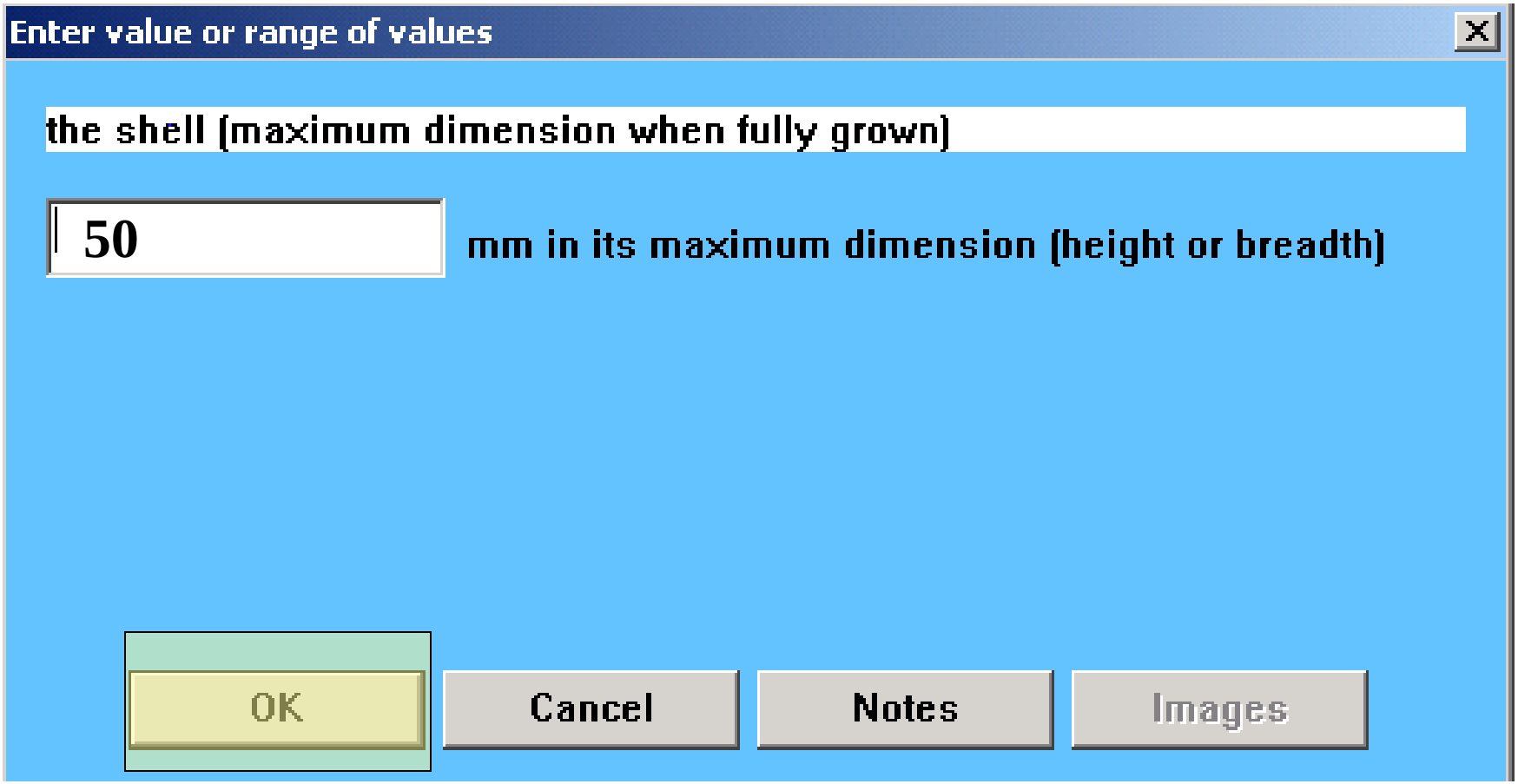
OK | Cancel | Notes | Images

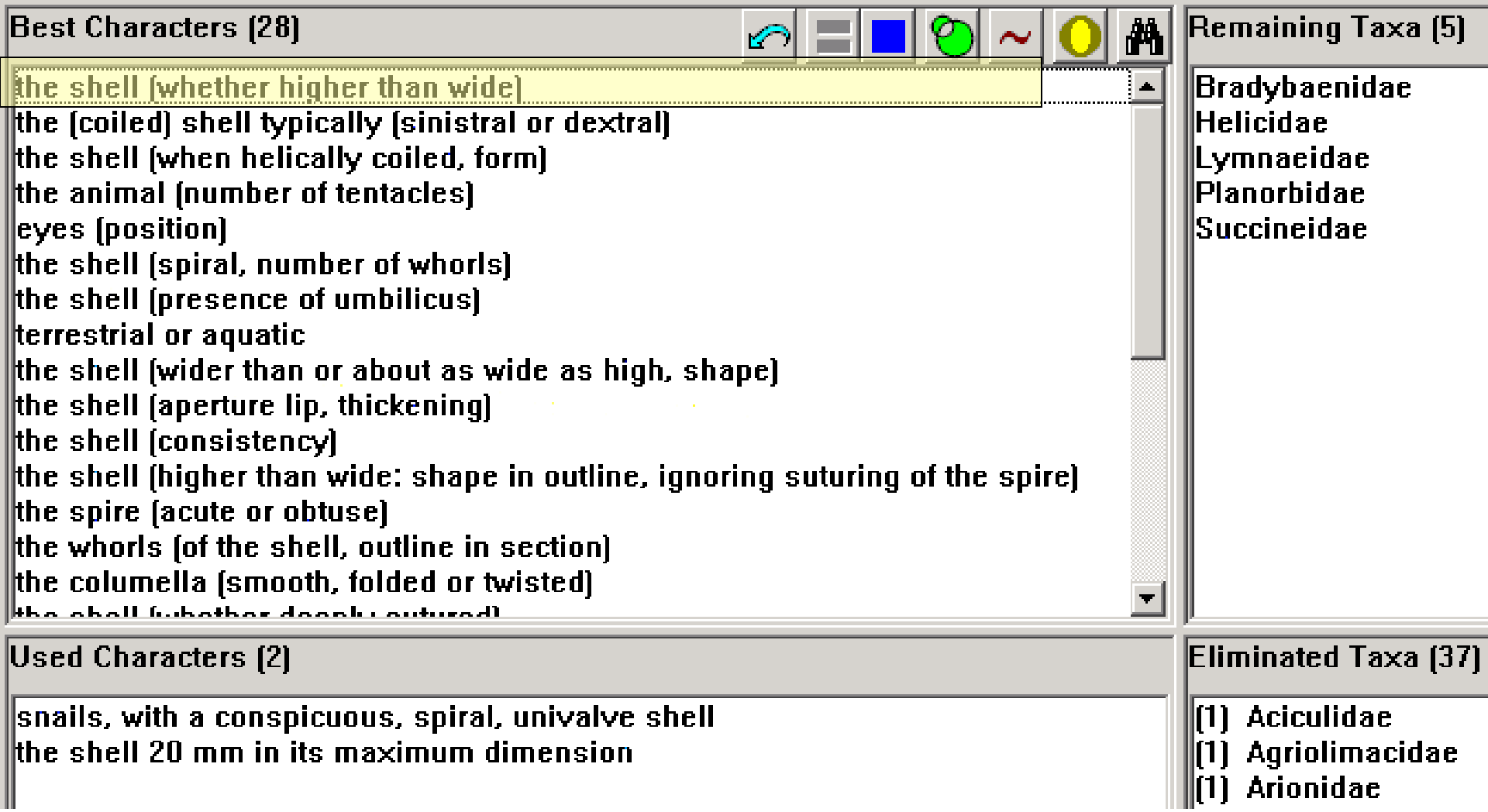
Used Characters (0)

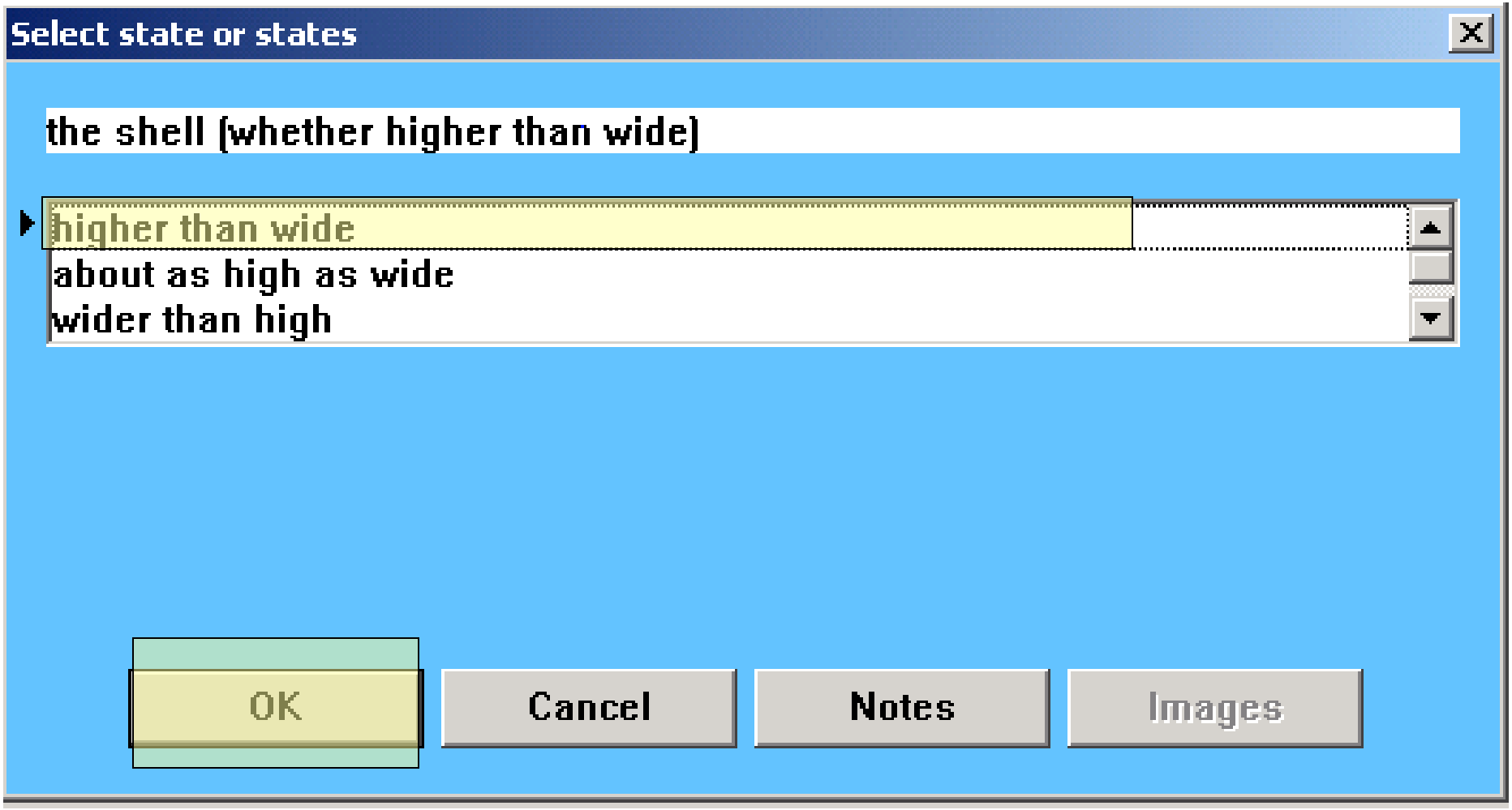
Remain
Aciculi
Acrolo
Agrioli
Ancylic
Arionic
Assimi
Bithyn
Boettg
Bradyl
Chond
Clausi
Cochli
Discid
Dreiss
Ellobii

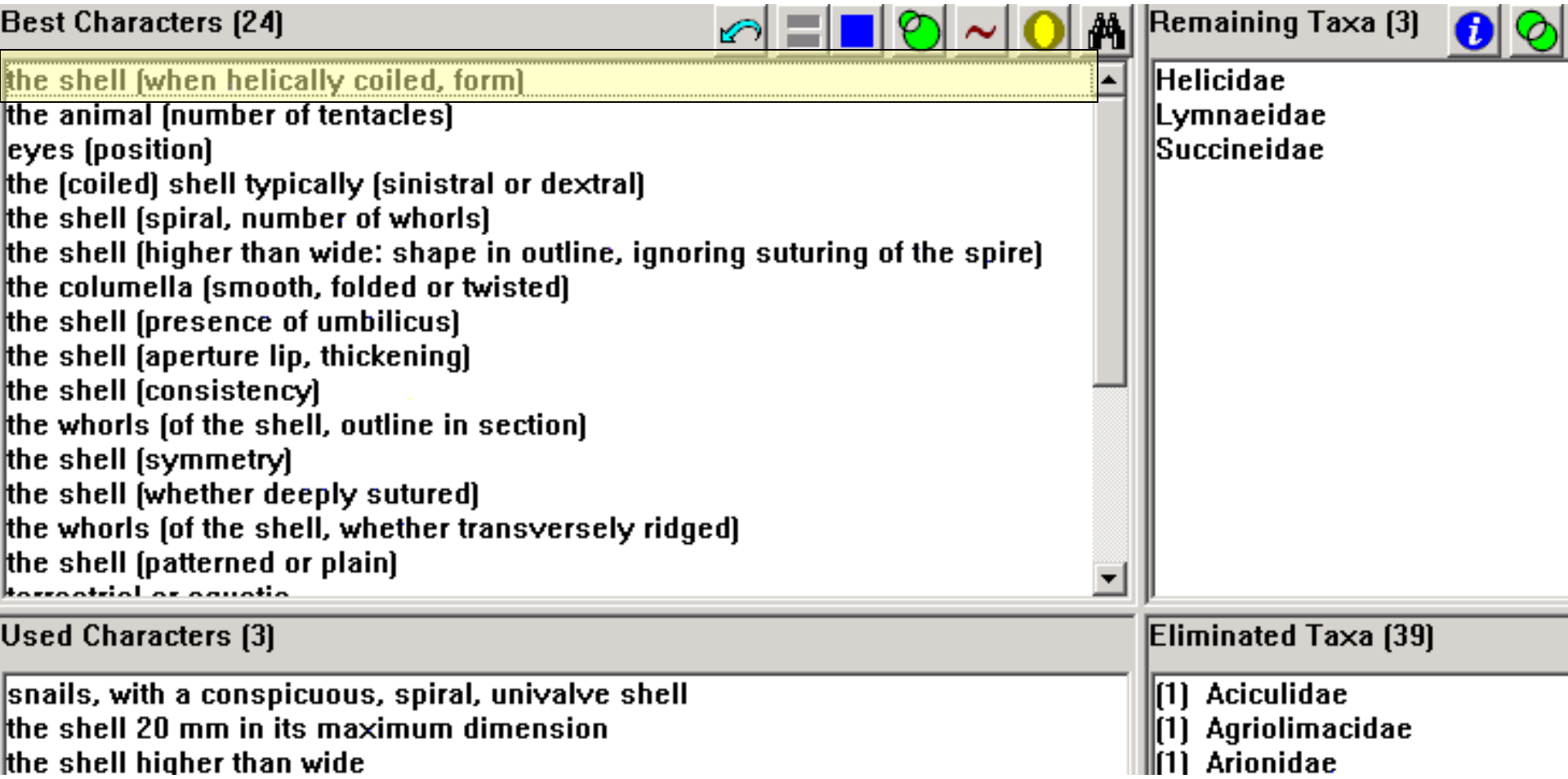
Elimina


Best Characters (41)
the shell (maximum dimension when fully grown)
the shell (whether higher than wide)
the shell (spiral, number of whorls)
the (coiled) shell typically (sinistral or dextral)
the shell (when helically coiled, form)
the shell (univalve, presence of an operculum: see Notes)
terrestrial or aquatic
the shell (higher than wide: shape in outline, ignoring suturing of the spire)
the shell (aperture lip, thickening)
eyes (position)
the aperture (of the shell, teeth or calluses)
the animal (number of tentacles)
height (of the shell, relative to its width) about
the shell (presence of umbilicus)
the spire (acute or obtuse)
Remaining Taxa (30)
Aciculidae
Assimineidae
Bithyniidae
Bradybaenidae
Chondrinidae
Clausiliidae
Cochlicopidae
Discidae
Ellobiidae
Enidae
Euconulidae
Ferussaciidae
Helicidae
Hydrobiidae
Lymnaeidae
Used Characters (1)
snails, with a conspicuous, spiral, univalve shell
Eliminated Taxa (12)
(1) Acroloxidae
(1) Agriolimacidae


Enter value or range of values
the shell (maximum dimension when fully grown)
50
mm in its maximum dimension (height or breadth)
OK
Cancel
Notes
Images


Best Characters (28)
the shell (whether higher than wide)
the (coiled) shell typically (sinistral or dextral)
the shell (when helically coiled, form)
the animal (number of tentacles)
eyes (position)
the shell (spiral, number of whorls)
the shell (presence of umbilicus)
terrestrial or aquatic
the shell (wider than or about as wide as high, shape)
the shell (aperture lip, thickening)
the shell (consistency)
the shell (higher than wide: shape in outline, ignoring suturing of the spire)
the spire (acute or obtuse)
the whorls (of the shell, outline in section)
the columella (smooth, folded or twisted)
Remaining Taxa (5)
Bradybaenidae
Helicidae
Lymnaeidae
Planorbidae
Succineidae
Used Characters (2)
snails, with a conspicuous, spiral, univalve shell
the shell 20 mm in its maximum dimension
Eliminated Taxa (37)
(1) Aciculidae
(1) Agriolimacidae
(1) Arionidae


Select state or states
the shell (whether higher than wide)
higher than wide
about as high as wide
wider than high
OK
Cancel
Notes
Images


Best Characters (24)
the shell (when helically coiled, form)
the animal (number of tentacles)
eyes (position)
the (coiled) shell typically (sinistral or dextral)
the shell (spiral, number of whorls)
the shell (higher than wide: shape in outline, ignoring suturing of the spire)
the columella (smooth, folded or twisted)
the shell (presence of umbilicus)
the shell (aperture lip, thickening)
the shell (consistency)
the whorls (of the shell, outline in section)
the shell (symmetry)
the shell (whether deeply sutured)
the whorls (of the shell, whether transversely ridged)
the shell (patterned or plain)
Remaining Taxa (3)
Helicidae
Lymnaeidae
Succineidae
Used Characters (3)
snails, with a conspicuous, spiral, univalve shell
the shell 20 mm in its maximum dimension
the shell higher than wide
Eliminated Taxa (39)
(1) Aciculidae
(1) Agriolimacidae
(1) Arionidae

Select state or states

the shell (when helically coiled, form)

planispiral (with a flush or sunken spire)

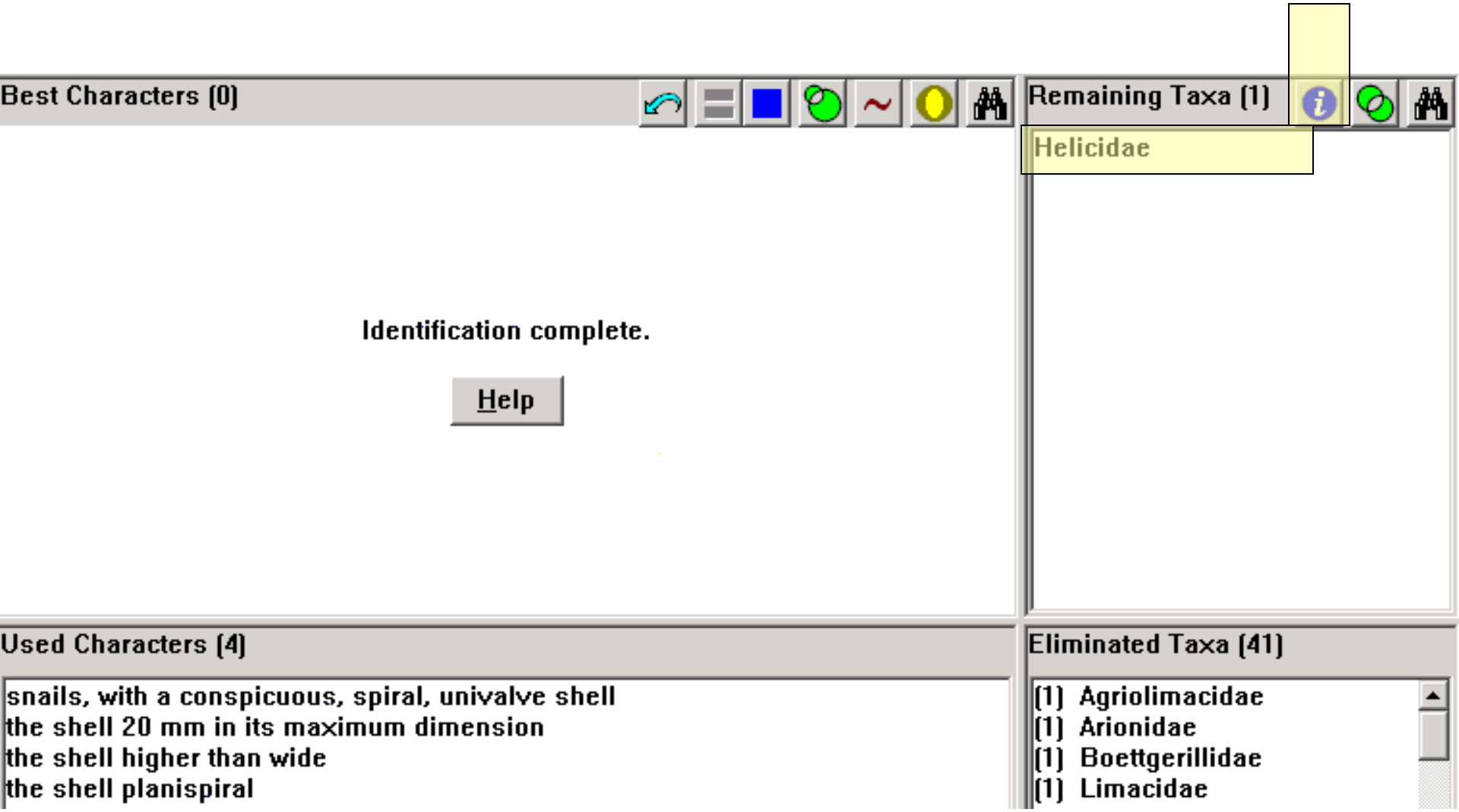
rising-spiral

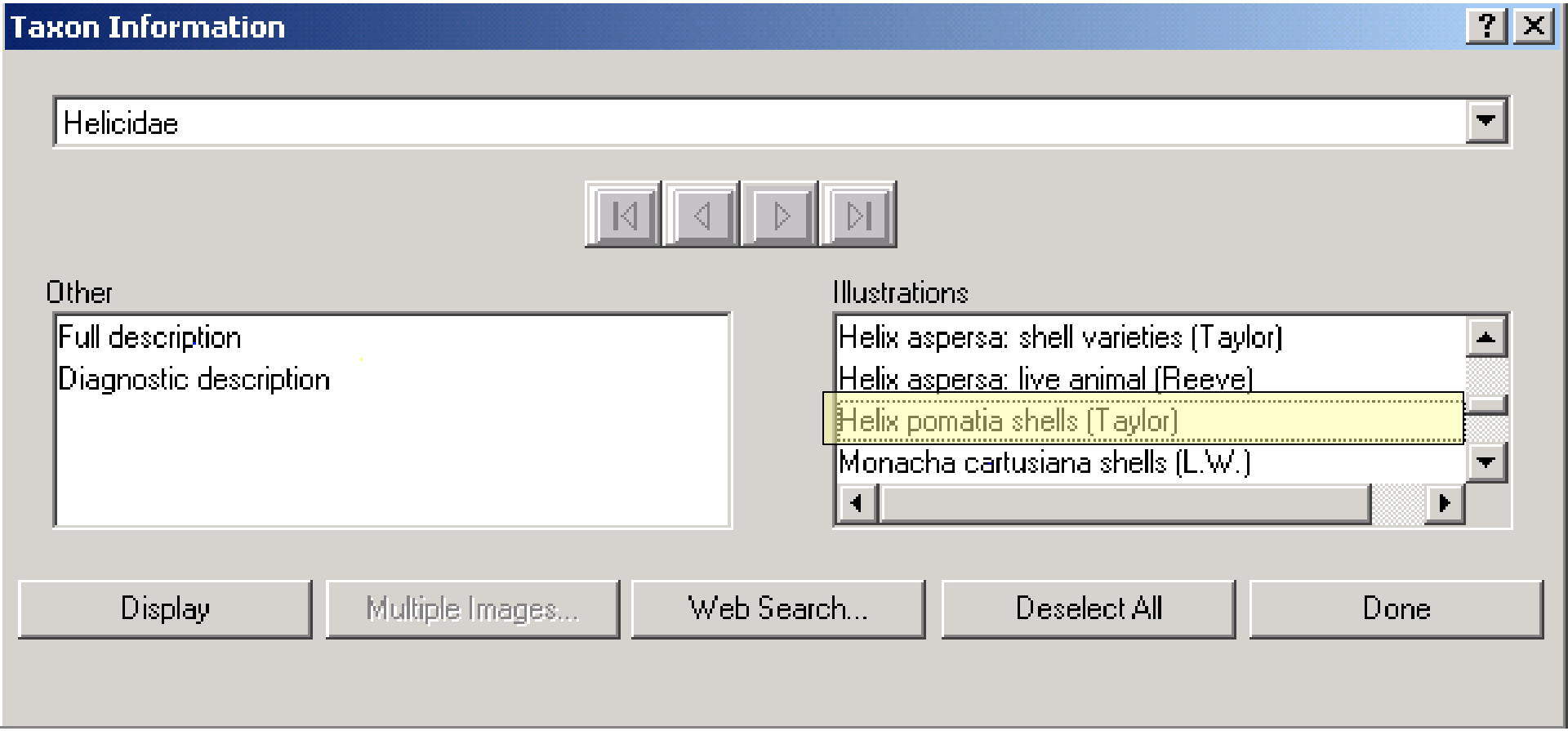
OK

Cancel

Notes

Images


Best Characters (0)
Remaining Taxa (1)
Helicidae
Identification complete.
Help
Used Characters (4)
snails, with a conspicuous, spiral, univalve shell
the shell 20 mm in its maximum dimension
the shell higher than wide
the shell planispiral
Eliminated Taxa (41)
(1) Agriolimacidae
(1) Arionidae
(1) Boettgerillidae
(1) Limacidae


Taxon Information
Helicidae
Other
Full description
Diagnostic description
Illustrations
Helix aspersa: shell varieties (Taylor)
Helix aspersa: live animal (Reeve)
Helix pomatia shells (Taylor)
Monacha cartusiana shells (L.W.)
Display
Multiple Images...
Web Search...
Deselect All
Done

Helicidae: Helix pomatia shells (Taylor)

Subject... Control Window

Helix pomatia Linné.
Cheltenham, Gloucestershire.
Showing the front and rear aspect, and also the hibernal epiphragm.

Helix pomatia sub-var. *hajnaldiana* Hazay.
Buda Pesth, Hungary.
Darbishire Collection, Manchester Museum.

Helix pomatia var. *brunnea* Moquin-Tandon.
Gallows Hill, Hertford.
A. G. Stubbs.

Helix pomatia var. *fasciata* Porro.
Buda Pesth, Hungary.
Darbishire Collection, Manchester Museum.

Helix pomatia var. *radiata* Ulicny.
Gallows Hill, Hertford.
A. G. Stubbs.

Notes

J. W. Taylor, del. ad nat.

Taylor Bros., Leeds.

MEKA

Multiple-Entry Key Algorithm

http://www.colby.edu/info.tech/BI211/info.html

Overview:

http://www.colby.edu/info.tech/BI211/info.html

noteikšana

ar

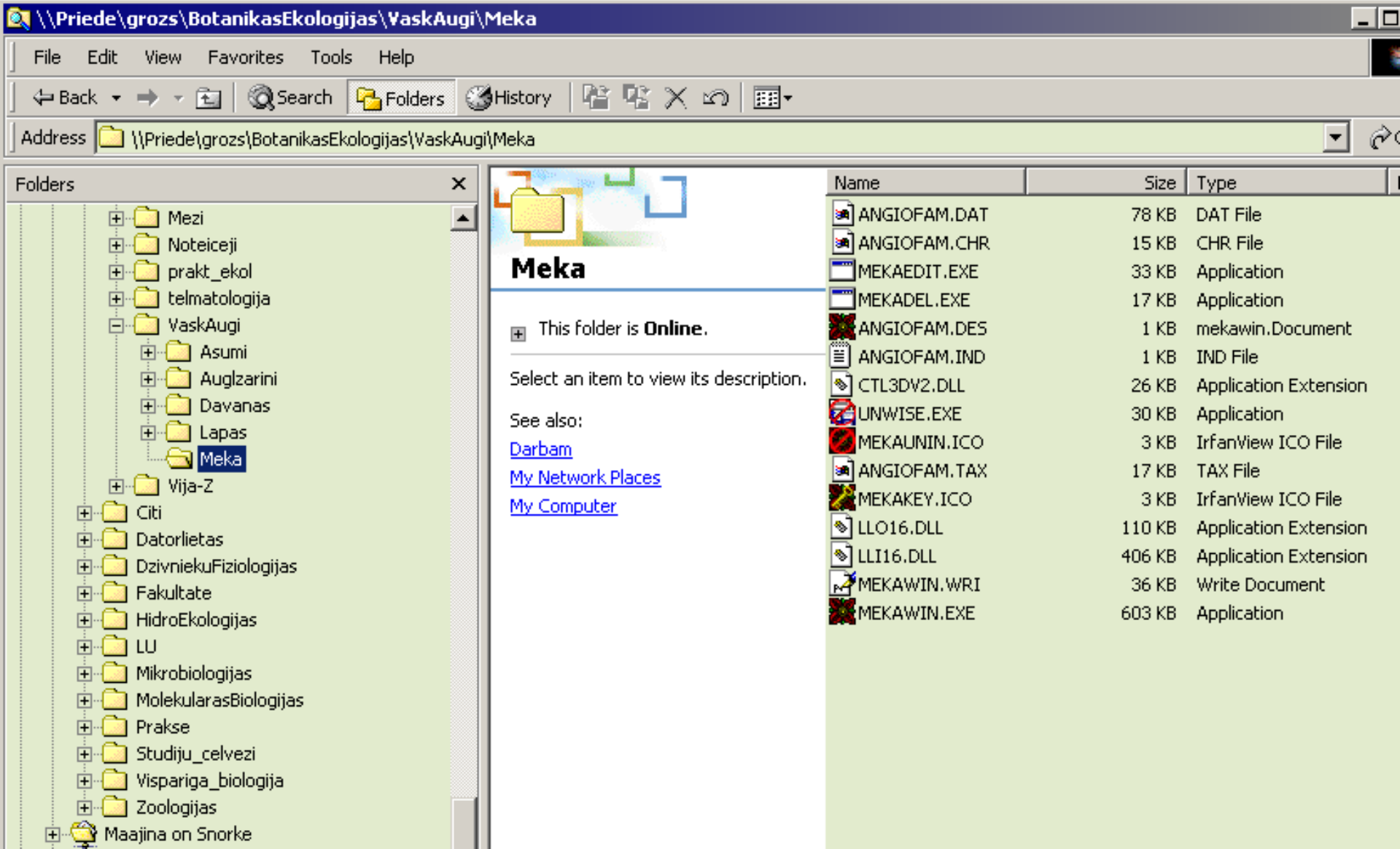
“MEKA”

NOTEICĒJI:

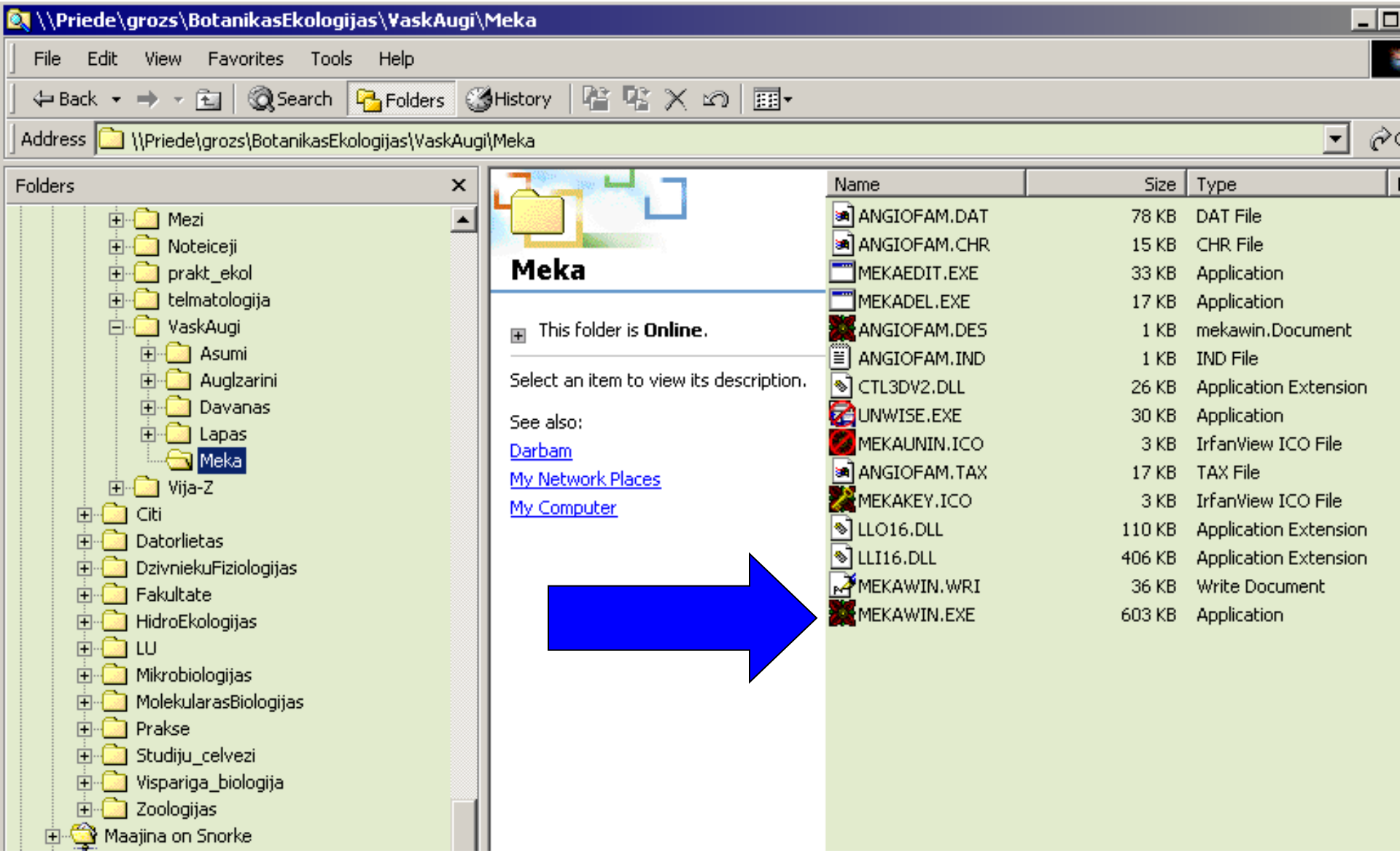
WOODY – Ziemeļamerikas kokaugi

ANGIOFAM – pasaules ziedaugu dzimtas

TROPIFAM – tropu kokaugu dzimtas

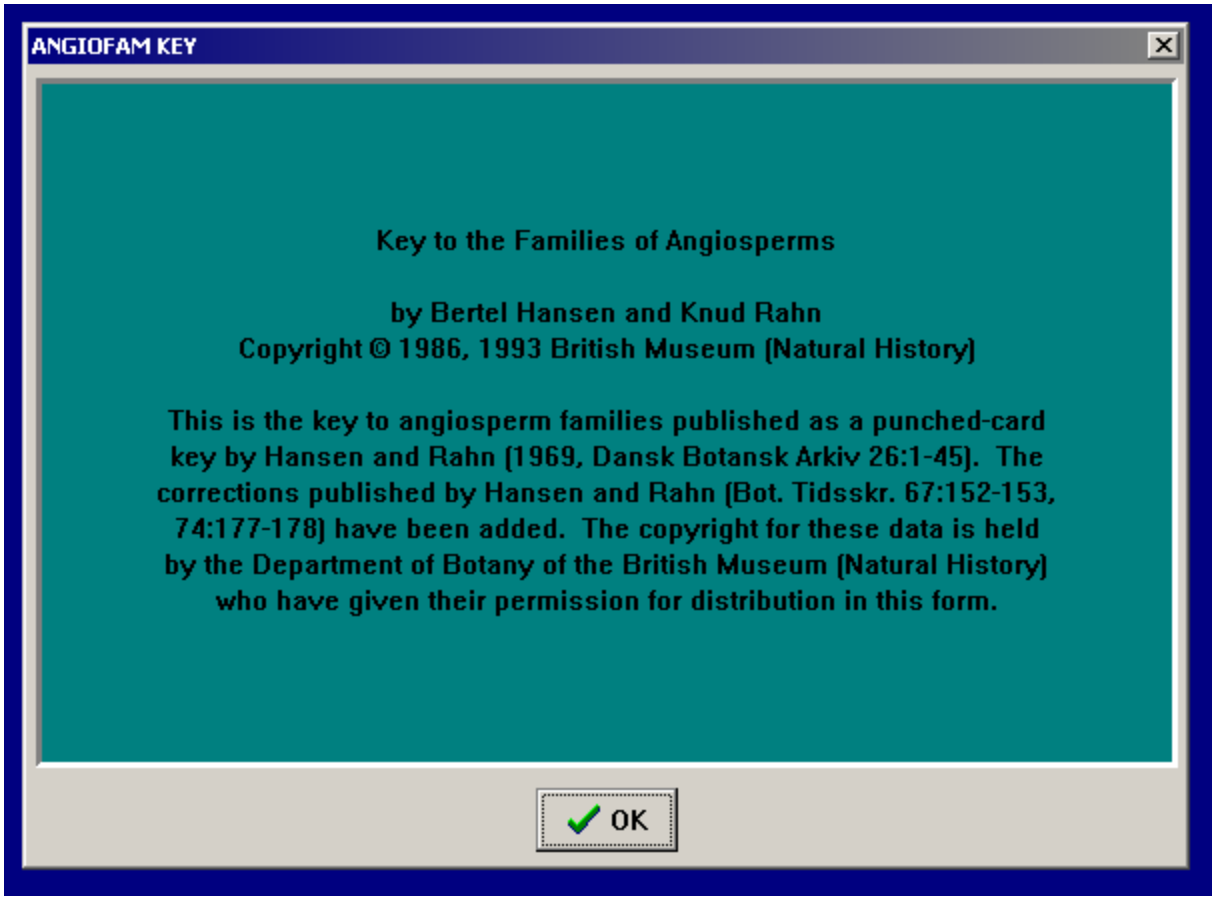

\\Priede\grozs\BotanikasEkologijas\VaskAugi\Meka
File Edit View Favorites Tools Help
Back Search Folders History
Address \\Priede\grozs\BotanikasEkologijas\VaskAugi\Meka
Folders
Mezi
Noteiceji
prakt_ekol
telmatologija
VaskAugi
Asumi
Auglzarini
Davanas
Lapas
Meka
Vija-Z
Citi
Datorlietas
DzivniekuFiziologijas
Fakultate
HidroEkologijas
LU
Mikrobiologijas
MolekularasBiologijas
Prakse
Studiju_celvezi
Vispariga_biologija
Zoologijas
Maajina on Snorke
Meka
This folder is Online.
Select an item to view its description.
See also:
Darbam
My Network Places
My Computer
Name Size Type
ANGIOFAM.DAT 78 KB DAT File
ANGIOFAM.CHR 15 KB CHR File
MEKAEDIT.EXE 33 KB Application
MEKADEL.EXE 17 KB Application
ANGIOFAM.DES 1 KB mekawin.Document
ANGIOFAM.IND 1 KB IND File
CTL3DV2.DLL 26 KB Application Extension
UNWISE.EXE 30 KB Application
MEKAUNIN.ICO 3 KB IrfanView ICO File
ANGIOFAM.TAX 17 KB TAX File
MEKAKEY.ICO 3 KB IrfanView ICO File
LLO16.DLL 110 KB Application Extension
LLI16.DLL 406 KB Application Extension
MEKAWIN.WRI 36 KB Write Document
MEKAWIN.EXE 603 KB Application

Noteikšanu iniciē uzklikšķinot MEKAWIN.EXE

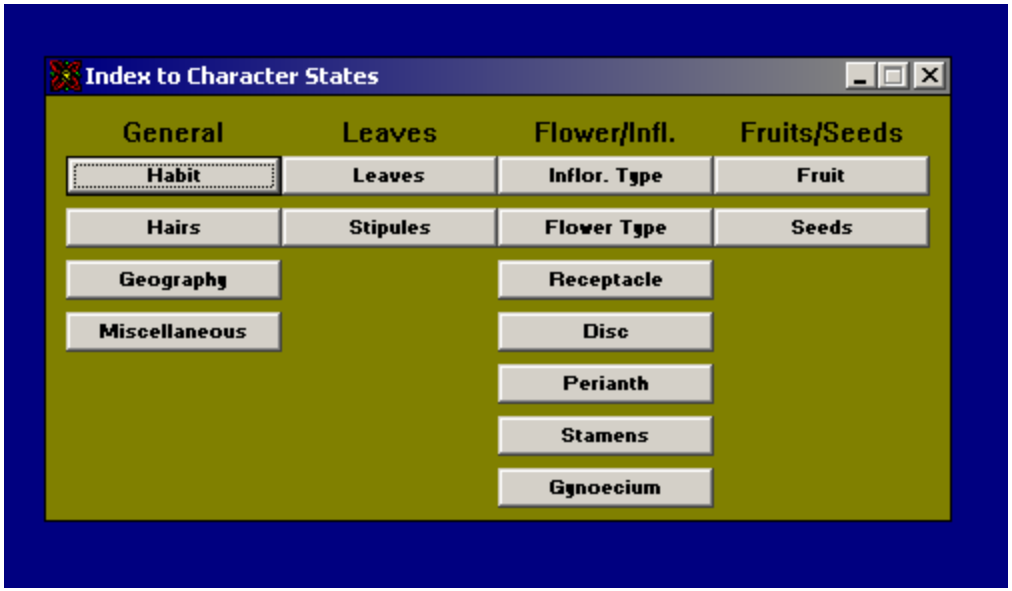


Parādās “MEKA” zīmols

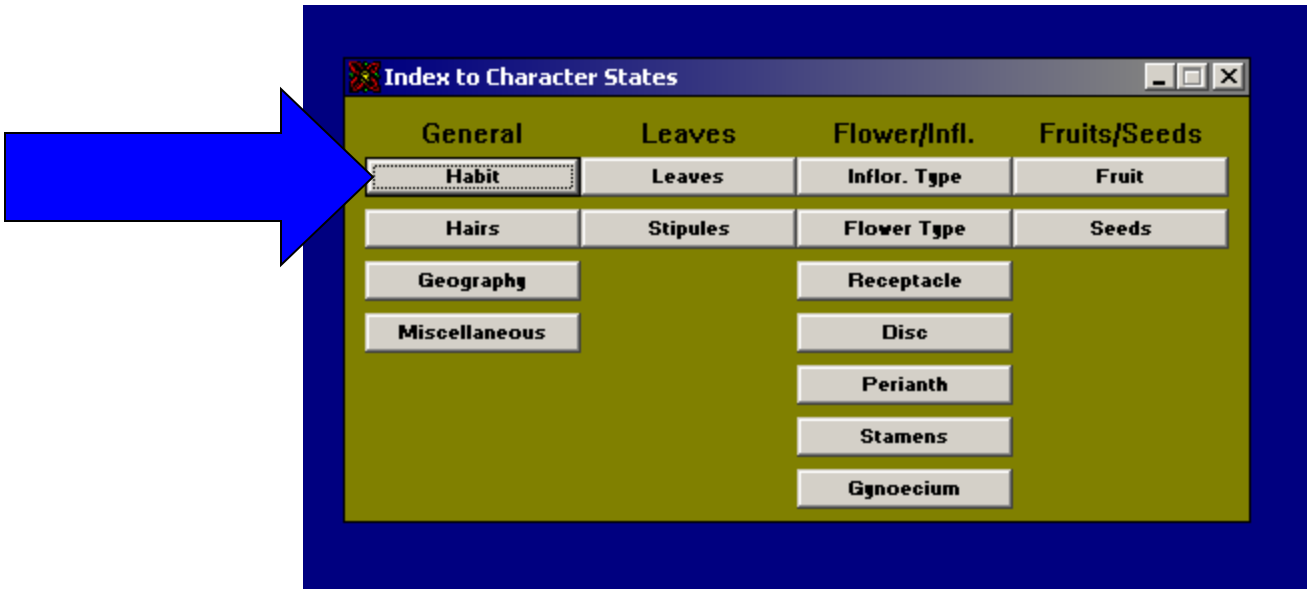
“ENTER” → ANGIOFAM zīmols



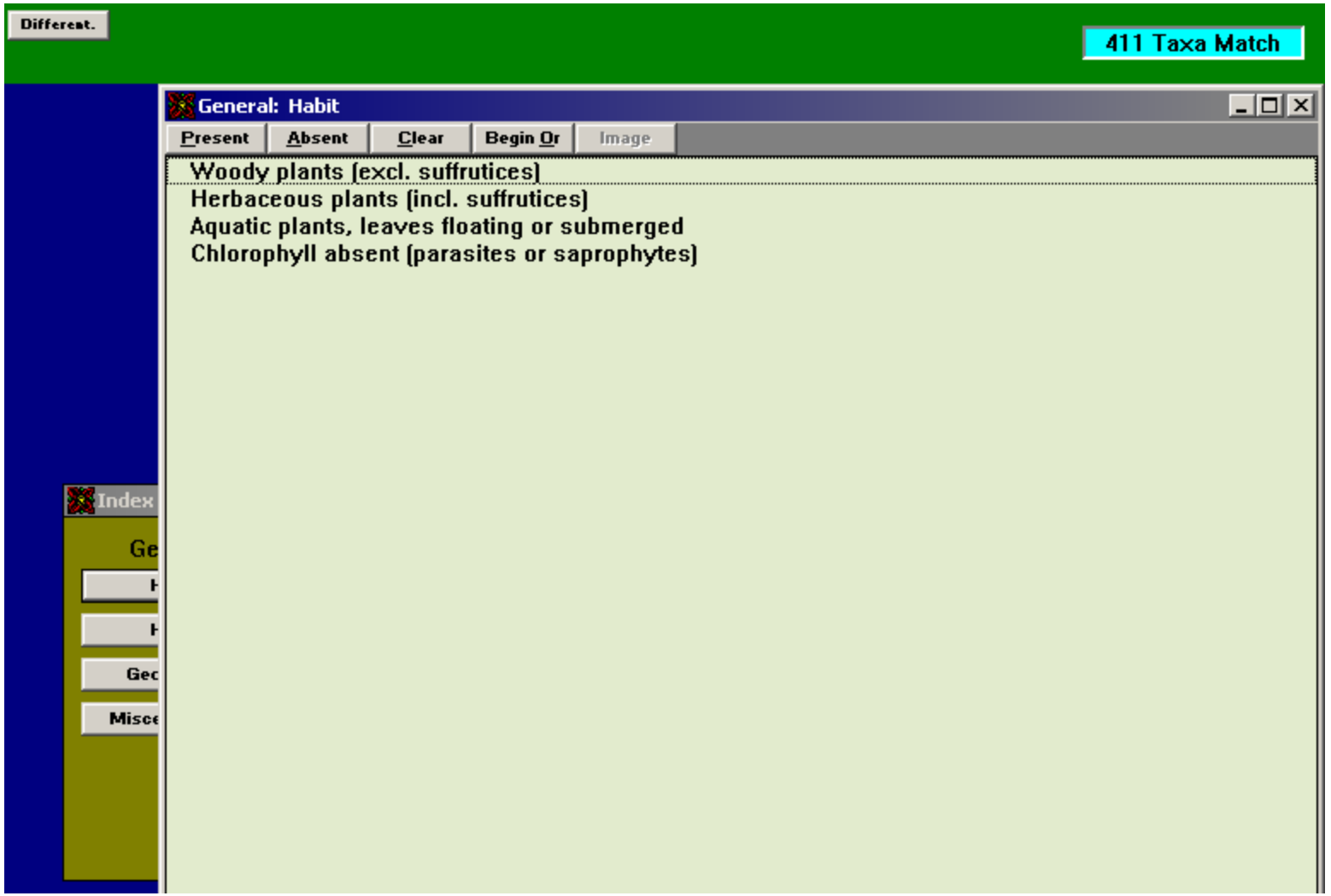
“ENTER” → pazīmju grupu izvēlne



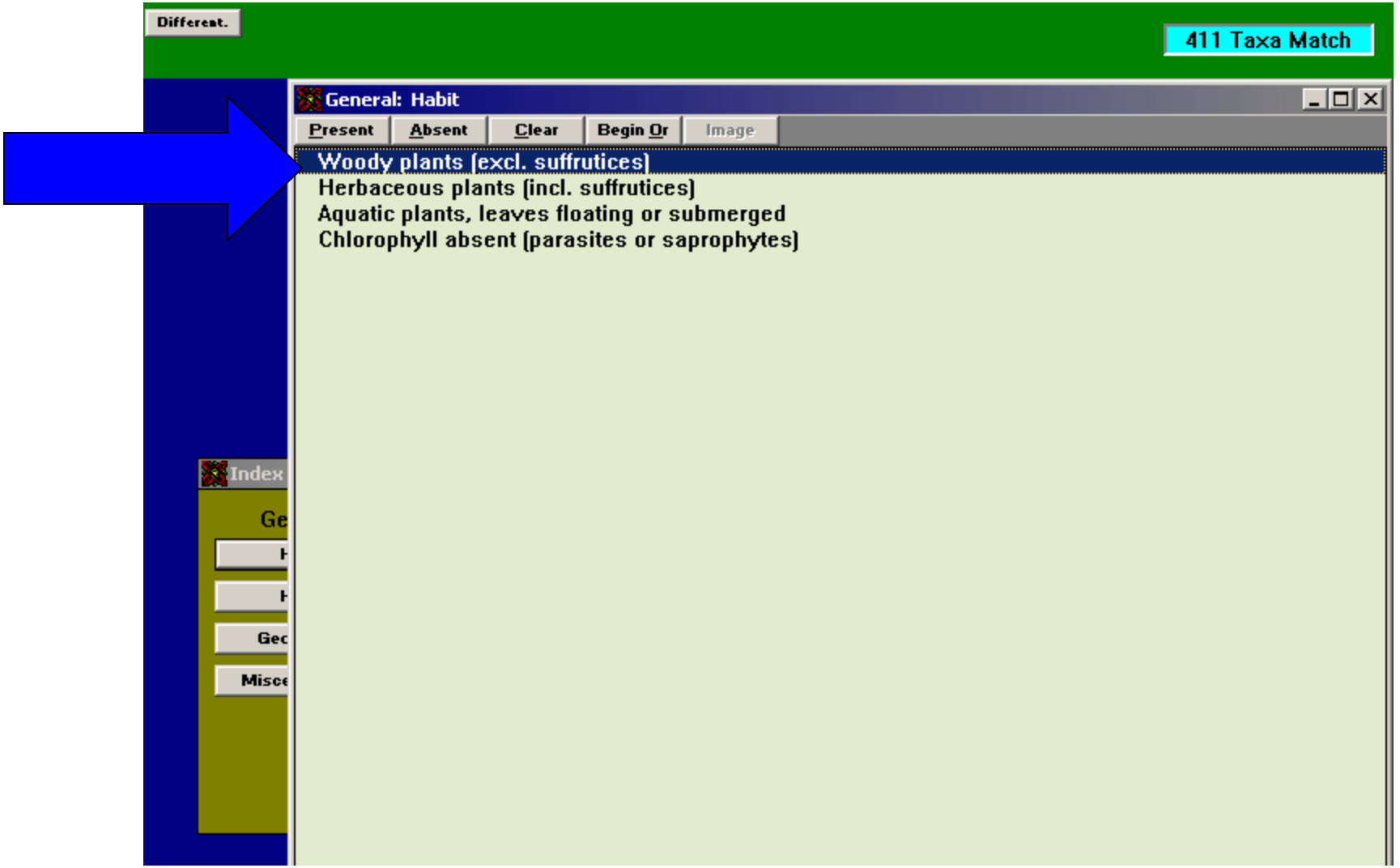
Izvēlas pazīmju grupu. Piemēram, “Habit”



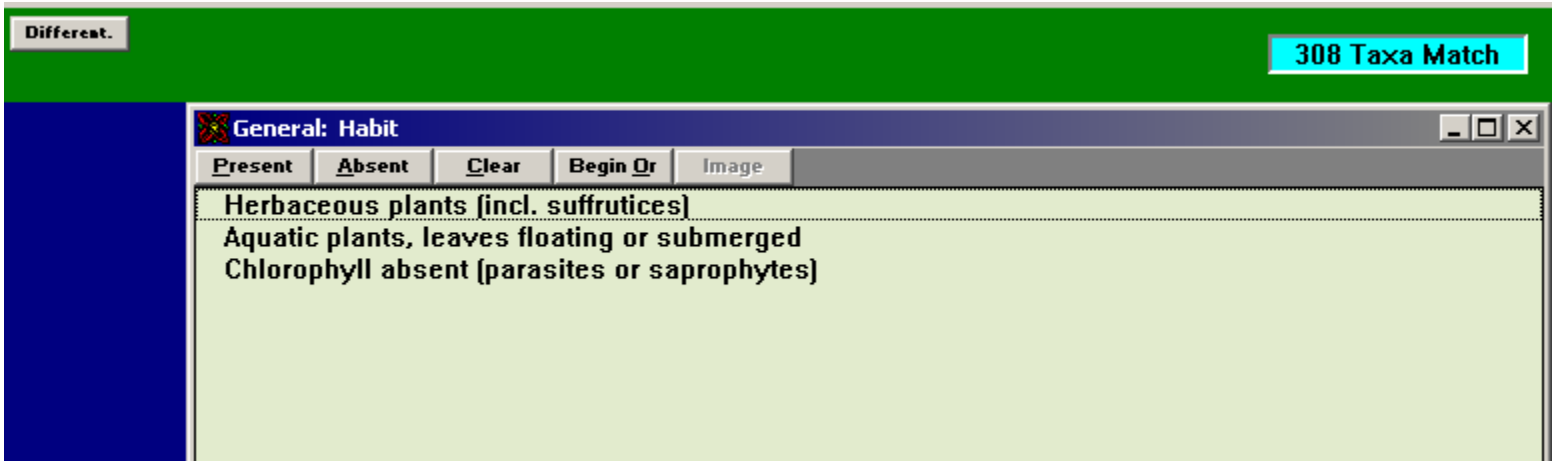
→ “HABIT” pazīmes



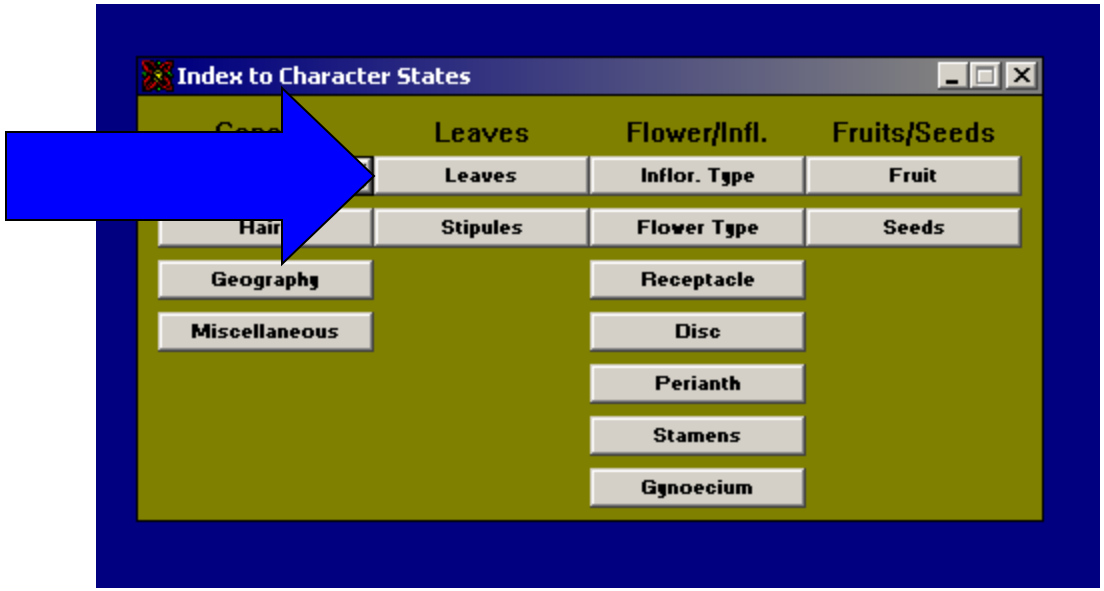
→ Izvēlas atbilstošo pazīmi.



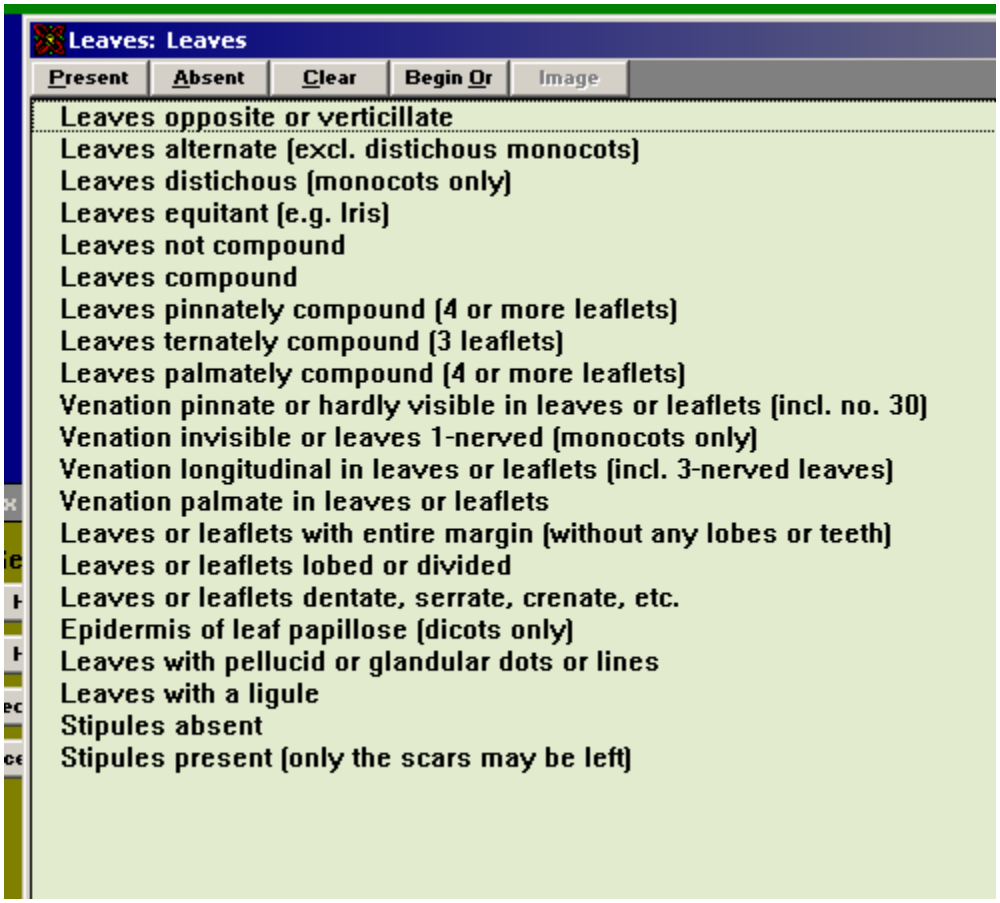
Paliek atlikušās noteikšanai izmantojamās “HABIT” pazīmes



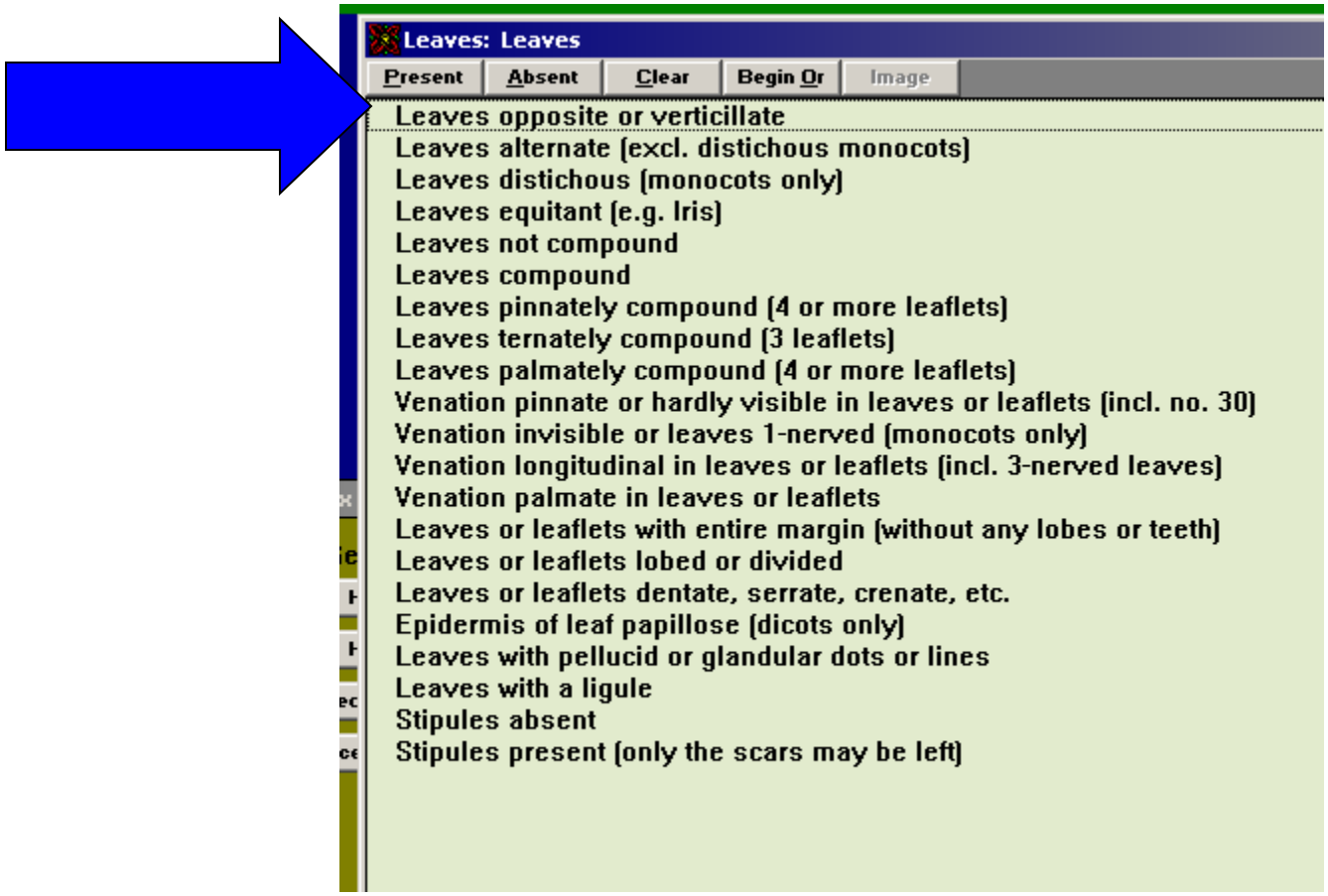
Izvēlas nākošo pazīmju grupu. Piemēram, “Leaves”



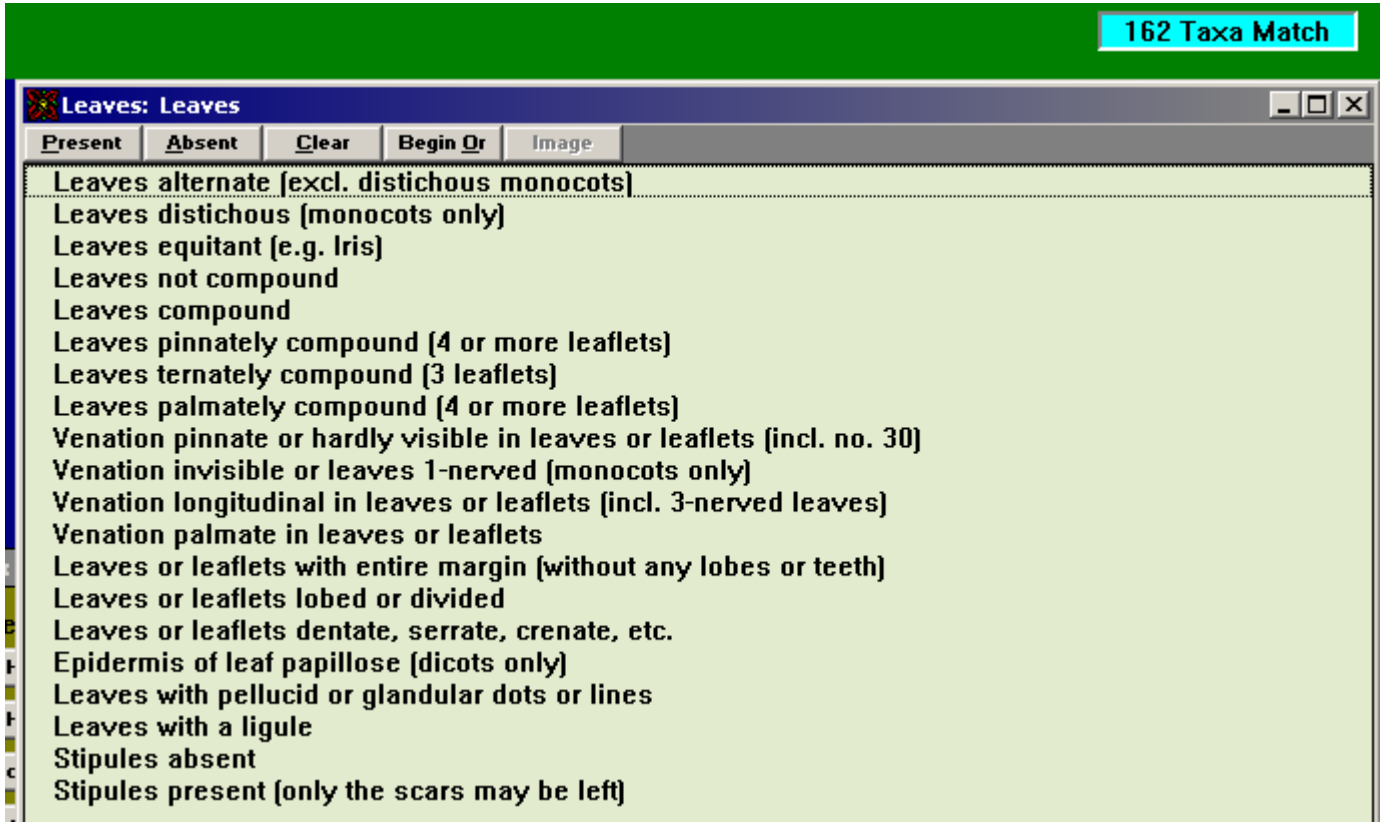
→ “LEAVES” pazīmes



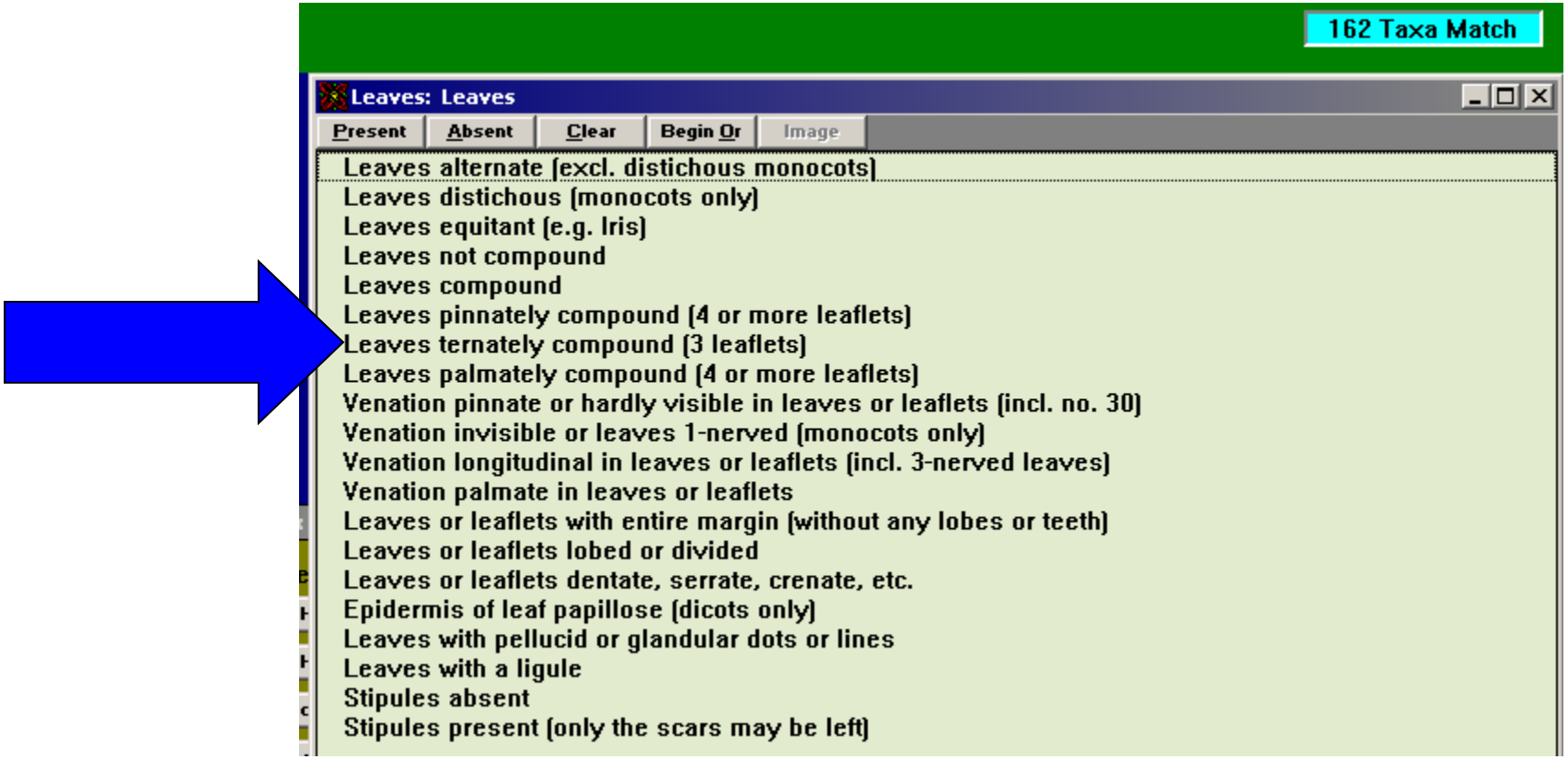
→ Izvēlas atbilstošo pazīmi.



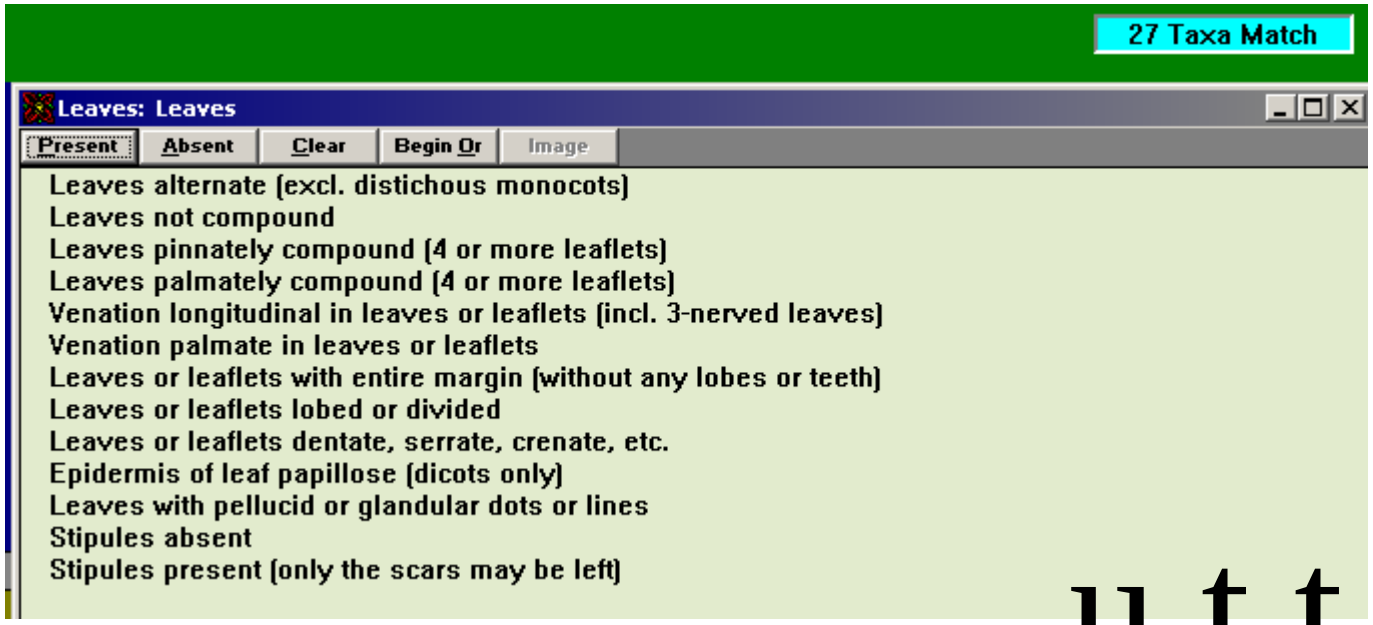
Paliek atlikušās noteikšanai izmantojamās “LEAVES” pazīmes



→ Izvēlas atbilstošo pazīmi.



Paliek atlikušās noteikšanai izmantojamās “LEAVES” pazīmes



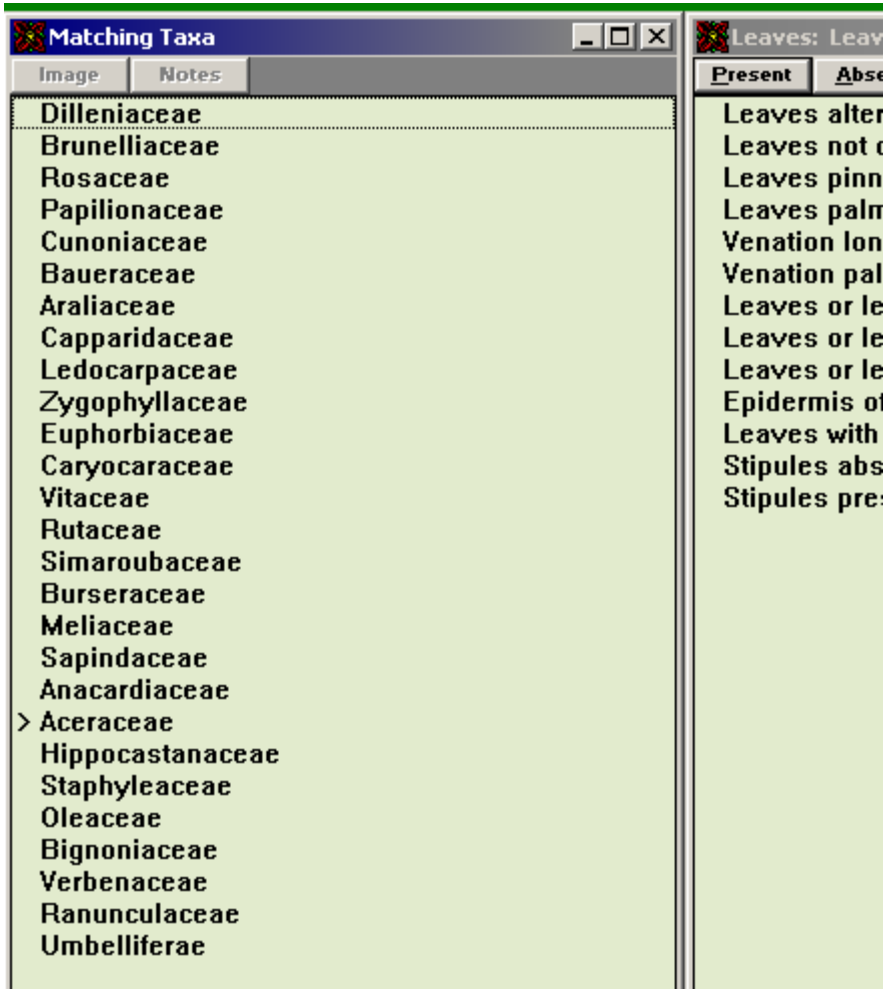
u.t.t.

Ar apskatīto pilnīgi pietiek, lai noteiktu, kādai dzimtai pētāmais augs (diagnoze) pieder.

VĒLAMS IZPĒTĪT CITU IZVĒLNES TAUSTIŅU IZMANTOŠANAS IESPĒJAS!

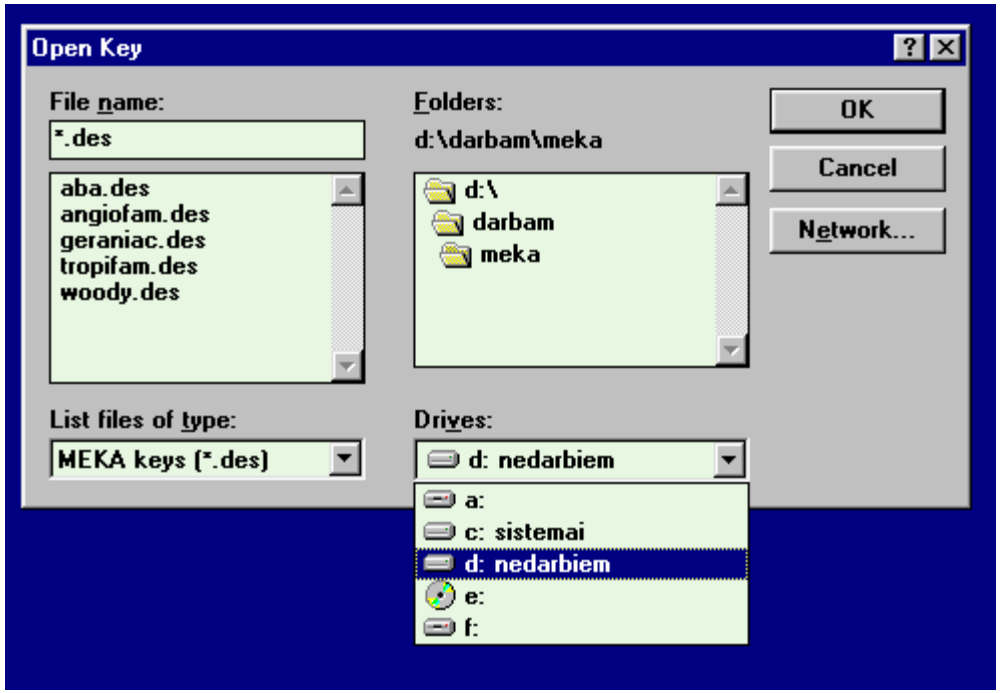
Piemēram, taustiņš “Match” sniedz iespēju apskatīt, kādas dzimtas atbilst pazīmēm, kas noteikšanā jau izmantotas

–> “Match”


Matching Taxa
Image
Notes
Dilleniaceae
Brunelliaceae
Rosaceae
Papilionaceae
Cunoniaceae
Baueraceae
Araliaceae
Capparidaceae
Ledocarpaceae
Zygophyllaceae
Euphorbiaceae
Caryocaraceae
Vitaceae
Rutaceae
Simaroubaceae
Burseraceae
Meliaceae
Sapindaceae
Anacardiaceae
> Aceraceae
Hippocastanaceae
Staphyleaceae
Oleaceae
Bignoniaceae
Verbenaceae
Ranunculaceae
Umbelliferae
Leaves: Leav
Present
Abse
Leaves alter
Leaves not
Leaves pinn
Leaves palm
Venation lon
Venation pal
Leaves or le
Leaves or le
Leaves or le
Epidermis of
Leaves with
Stipules abs
Stipules pre

Ja sākot noteikšanu neparādās “ANGIOFAM” zīmols

→ Key → Open



Izvēlas pareizo ceļu uz apakšdirektoriju “MEKA” un sāk noteikšanu

dāvana

//Priede/kurvis/
Botaanikas_un_ekologijas_
katedra/

MEKA

13.uzdevums. ZIEDAUGU DZIMTU NOTEIKŠANA.
Iekopējiet savā datorā apakšdirektoriju “MEKA”.
Izmantojot noteicēju “Segdz” nosakiet,
kādai dzimtai pieder augs.
Rezultātu atspoguļojiet atbildes failā iekopējot
“Matching taxa” un “Character state history”

14.uzdevums. ZIEDAUGU DZIMTU NOTEIKŠANA.
Izmantojot noteicēju “Angiofam” no apakšdirektorijas “MEKA” nosakiet,
kādai dzimtai atbilst diagnoze Nr._____.
Rezultātu atspoguļojiet atbildes failā iekopējot “Matching taxa” un “Character state history”
un ieskenējot identificētā parauga ziedu.

diagnozes

1. diagnoze:

Habit: Herbaceous plants.

Leaves alternate, simple (not compound), with entire margin, stipules absent.

Inflorescences: spike.

Flowers: bisexual, actinomorphic.

Disc: present.

Perianth: the sepals 5, free, the petals 0.

Stamens: free.

Gynoecium: the carpels 10, free from each other; the ovule 1 per locule; ovary with more than 5 locules; ovules attached to the base of the ovary.

Geography: North America.

BLFl_noteiceji.ppt

4LD_Vards.ppt