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http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&searc Go



# INOTAXA

## Mesoamerican Portal



The following figures illustrate various aspects of the proposed INOTAXA prototype implementation. They are designed as indicative only, and should not be taken as accurate representations of the final screens. Detailed screen design will take place before the prototype is released. The figures illustrate the document “Prototype Functionality: INOTAXA - Mesoamerican Portal”.

Done




Fig. 1

The screenshot shows a Mozilla Firefox browser window with the following elements:

- Browser Title Bar:** Mozilla Firefox
- Menu Bar:** File, Edit, View, Go, Bookmarks, Tools, Help
- Address Bar:** <http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&searc>
- Page Header:**
  - Logo:** INOTAXA Mesoamerican Portal. The logo is circular with a map of Mesoamerica in the center. Text around the map includes "INOTAXA Mesoamerican Portal" and "INTEGRATED OPEN TAXONOMIC ACCESS".
  - Title:** *INOTAXA*  
*Mesoamerican Portal*
  - Image:** A stylized white flower with a purple center.
- Main Content Area:**
  - Section Header:** Search Biota of MesoAmerica
  - Instructions:** select one or more choices from each list below and enter one or more search terms:
  - Filters:**
    - select taxon/taxa: all
    - select region(s): all
    - select work(s): all
    - select context: all
  - Search Input:** enter term(s): [text input field]
  - Search Button:** SEARCH
  - Navigation Buttons:** IMAGE SEARCH, ADVANCED SEARCH, BROWSE TAXON TREE, BROWSE GEOGRAPHIC TREE
  - Previous Search:** Previous search: [none]
  - Footer Buttons:** HOME, BACK
- System Tray:** Done, network status, weather icons.

Fig. 2. Selection lists (incomplete) for selection boxes in Fig 1.

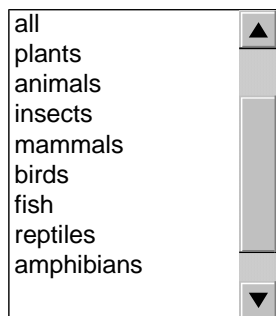


Fig. 2a.  
'select  
taxon'



Fig. 2b.  
'select  
region'

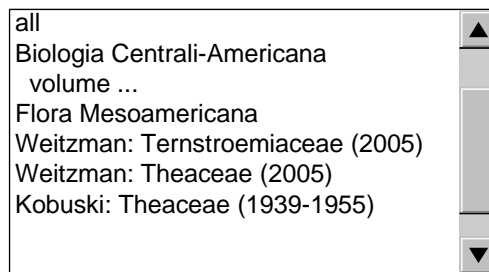


Fig. 2c. 'select  
work'

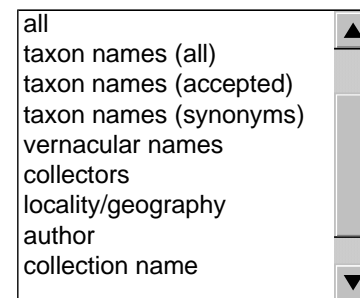


Fig. 2d.  
'select  
context'

Fig. 3

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**INOTAXA**  
*Mesoamerican Portal*

**Search Biota of MesoAmerica**

select one or more choices from each list below and enter one or more search terms:

select taxon/taxa: select region(s): select work(s): select context:

all all all all

enter term(s):

femora **SEARCH**

IMAGE SEARCH ADVANCED SEARCH BROWSE TAXON TREE BROWSE GEOGRAPHIC TREE

Previous search: [none]

HOME BACK

Done



Fig. 5

**Context in BCA classification**

- Rhynchophora
  - Curculionidae
    - Attelabinae
      - Attelabus

Sharp, 1899, BCA, Coleoptera Volume 4, Part 3 pp2, 4, 5, 11, 12, 13

Key to *Attelabus*

- I. Anterior femora without teeth or spines. .... (*Attelabus*, *auct.*)
  - A. Eyes very widely separated, the space between them not carinate; spurs of the anterior tibiae; of the female placed one in front of the other.....(*Pilolabus*, *Jekel.*)
    - [Attelabus diffinis](#)
    - [Attelabus kluqi](#)
    - [Attelabus nigriclava](#)
    - [Attelabus smithii](#)
    - [Attelabus splendens](#)
    - [Attelabus sumptuosus](#)
    - [Attelabus vindans](#)
  - B. Eyes only moderately distant, the space between them carinate; surface pubescent; spurs of the anterior tibiae; of the female placed one above the other.....(*Himatolabus*, *Jekel.*)
    - [Attelabus axillaris](#)
    - [Attelabus rudis](#)
    - [Attelabus vestitus](#)
    - [Attelabus vinosus](#)
  - C. Eyes but little separated, the space between them sulcate or carinate; surface without pubescence..... (*Xestolabus*, *Jekel.*)
    - [Attelabus — ?](#)
    - [Attelabus anquilipennis](#)
    - [Attelabus brevicollis](#)
    - [Attelabus callosus](#)
    - [Attelabus conicollis](#)
    - [Attelabus corvinus](#)
    - [Attelabus heterocerus](#)
    - [Attelabus laesicollis](#)
    - [Attelabus liquilatus](#)
    - [Attelabus longiclava](#)
    - [Attelabus melanopygus](#)
    - [Attelabus quadratus](#)
    - [Attelabus sedatus](#)
- II. Anterior femora irregularly serrate; form extremely short and broad. .... (*Hylolabus*, *Jekel.*)

Fig. 6

Curculionidae

- Attelabinae
  - Attelabus
    - Attelabus
      - Himatolabus
        - Attelabus vinosus

Context in BCA classification

Sharp, 1899, BCA, Coleoptera Volume 4, Part 3 p. 5

10. *Attelabus vinosus*, sp. n.

Rufo-obscurus, pube pallescente sat dense vestitus; prothorace elytrisque fortius sculpturatis; scutello subquadrato, haud transverso.  
Long. 5.5 millim.

Hab. MEXICO, Totosinapam, Capulalpam (Sallé), Jalapa (Höge); GUATEMALA, Quiche Mountains 7000 to 8000 feet (Champion).

Closely allied to *A. vestitus*, but distinguished by the dark vinous-red colour and the much more evident sculpture. The sexual distinctions, except in the front legs, are slight. The rostrum is quite short, thick, the head broad, the eyes placed nearly midway between the front of the thorax and the mouth. The thorax is rather coarsely and irregularly sculptured, without any transverse groove. The elytra are even, scarcely at all depressed behind the scutellum, rather coarsely and irregularly sculptured, the striation quite visible. The front **femora** are entirely unarmed.

A specimen of this species in Sallé's collection from Sturm's cabinet is labelled *A. cinnamomeus*, Sturm; but as this name is not a suitable one - being much more applicable to the closely allied *A. vestitus* - I have not used it. The four Mexican examples before me are all in a bad state of preservation; the description therefore is taken from the Guatemalan exponents, six in number.

INOTAXA Mesoamerican Portal  
INTEGRATED OPEN TAXONOMIC ACCESS

BIOLOGIA CENTRALI AMERICANA electronic

Fig. 7

The screenshot shows a Mozilla Firefox browser window with the address bar displaying `http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&searc`. The main content area features a search results summary for *Apterocolus*, including a taxonomic tree (Curculionidae, Rhynchitidae, Pterocolinae, Apterocolus), a citation for Hamilton (1998), and a list of search options. A search filter is applied: "Any field contains 'femora' ordered by 'taxon name' then by 'taxon author' then by 'treatment author' then by 'publication date'".

**New Simple Search:**  
select one or more choices from each list below and enter one or more search terms:  
select taxon/taxa: all  
select region(s): all  
select work(s): all  
select context: all  
enter term(s):  
**SEARCH**  
IMAGE SEARCH  
ADVANCED SEARCH  
BROWSE TAXON TREE  
BROWSE GEOGRAPHIC TREE  
Previous search:  
Any field contains "femora" ordered by 'taxon name' then by 'taxon author' then by 'treatment author' then by 'publication date'  
OTHER TREATMENT(S)  
KEY(S) WITHIN TAXON  
KEY(S) TO TAXON  
DISTRIBUTION MAP  
SPECIMEN(S)  
TOGGLE TO PDF  
TOGGLE TO JPEG  
IMAGE(S)  
GAZETTEER  
SEARCH HUH BOTANISTS  
SEARCH Flora Mesoamericana  
SEARCH GBIF  
SEARCH GOOGLE  
SEARCH GOOGLE IMAGES  
HOME BACK

**Curculionidae**  
Rhynchitidae  
Pterocolinae  
Apterocolus

Context in Alonso-Zarazaga & Lyal classification

Hamilton, R.W., 1998, Transactions of the American Entomological Society, 124 (3,4) p. 209

**Apterocolus Sharp**

*Apterocolus* Sharp, 1890: 44

Type species: *Apterocolus gravidus* Sharp

*Generic description.* – Moderate sized species (length 3.7 mm-5.1mm), body compact-ovate, black to bluish-black. [rest of description not entered into example, but text would continue to end of taxon treatment, with “**metafemora**” in bold.]

INOTAXA Mesoamerican Portal INTEGRATED OPEN TAXONOMIC ACCESS

THE AMERICAN ENTOMOLOGICAL SOCIETY FOUNDED 1889 INCORPORATED 1889 1867

Done




Fig. 8

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# INOTAXA

## Mesoamerican Portal



### Biota of MesoAmerica: Image Search

The search may be limited by selecting one or more geographic region(s):

select region(s):  
all

enter taxon name  
Pilolabus viridans

SEARCH

SIMPLE SEARCH    ADVANCED SEARCH    BROWSE TAXON TREE    BROWSE GEOGRAPHIC TREE

Previous search: [none]

HOME    BACK

Done

Fig. 8a

The screenshot shows a Mozilla Firefox browser window with the following elements:

- Address Bar:** `http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&searc`
- Search Results:** Two images of the beetle *Pilolabus viridans* are displayed side-by-side, each with the text "Pilolabus viridans" below it.
- Left Sidebar:**
  - Buttons for: SIMPLE SEARCH, ADVANCED SEARCH, BROWSE TAXON TREE, BROWSE GEOGRAPHIC TREE.
  - Section: Previous start: Pilolabus viridans
  - Buttons for: OTHER TREATMENT(S), KEY(S) WITHIN TAXON, KEY(S) TO TAXON, DISTRIBUTION MAP, SPECIMEN(S), TOGGLE TO PDF, TOGGLE TO JPEG, GAZETTEER, SEARCH HUH BOTANISTS, SEARCH *Flora Mesoamericana*, SEARCH GBIF, SEARCH GOOGLE, SEARCH GOOGLE IMAGES, HOME, BACK.
- Right Side:** INOTAXA Mesoamerican Portal logo with the text "INTEGRATED OPEN TAXONOMIC ACCESS".
- Bottom Status Bar:** Shows "Done" and system tray icons.

Fig. 9

INOTAXA  
Mesoamerican Portal

Biota of MesoAmerica:  
Browse Geographic Tree

enter a starting place name:

Start browse

IMAGE SEARCH   SIMPLE SEARCH   ADVANCED SEARCH   BROWSE TAXON TREE

HOME   BACK

Please enter the name of the geographical area or place within which you wish to start browsing. If you do not enter a browse term the tree will open at 'World'.

On selecting a tree, branches can be opened to reveal place names lower in the geographical hierarchy. Branches at each geographical level will lead to data "for [placename]" where no more detailed geographical information is available, or "within [placename]" where more detailed information is associated with the data.

Data accessible through the tree are:

1. Taxa;
2. Collectors;
3. Specimens (data not available at all levels);
4. Geographic detail


Fig. 10

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http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&searc

Go



# INOTAXA

## Mesoamerican Portal



### Biota of MesoAmerica: Browse Geographic Tree

enter a starting place name:

There are several possible locations. Please select one:

Done

Fig. 11

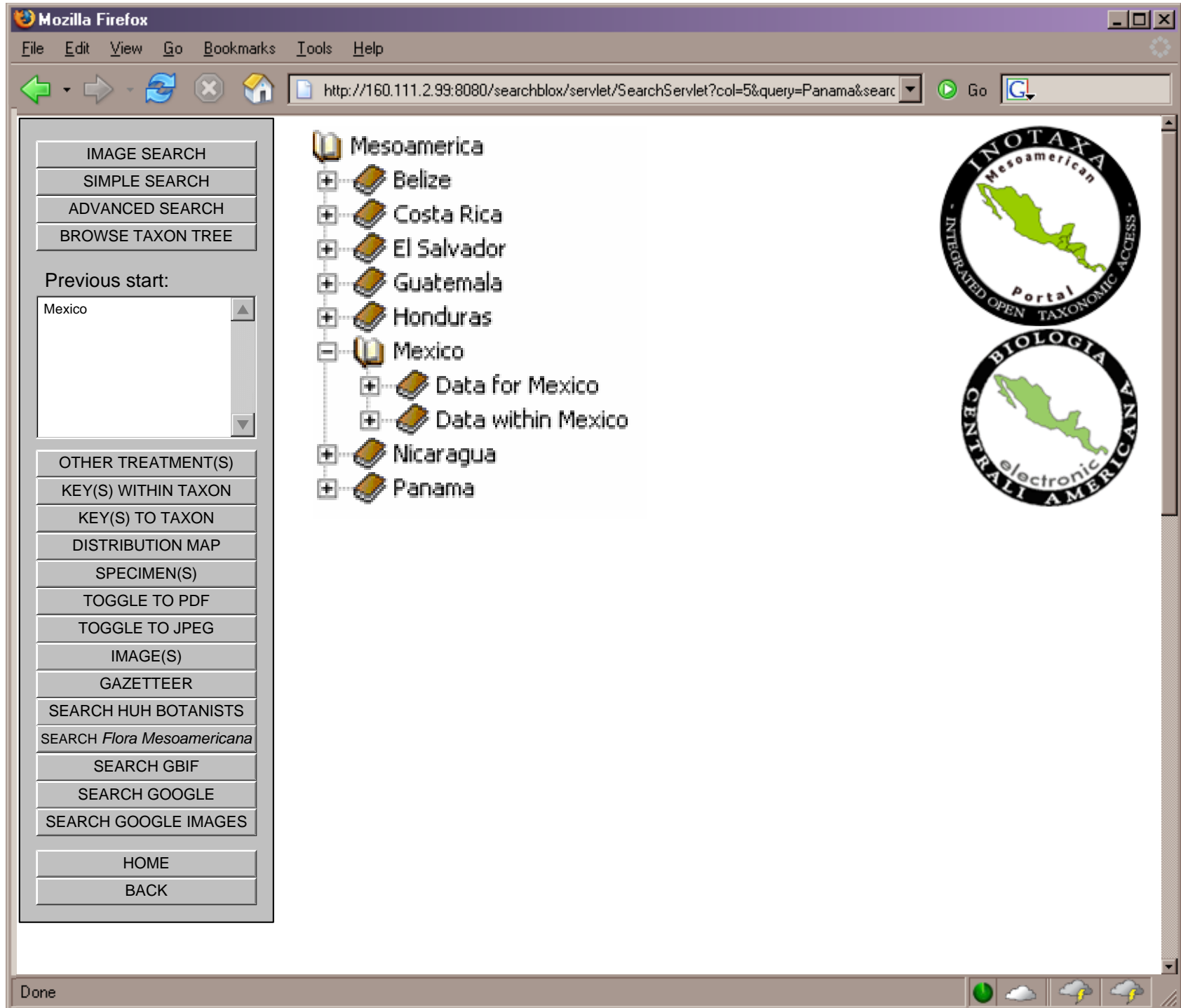


Fig. 12

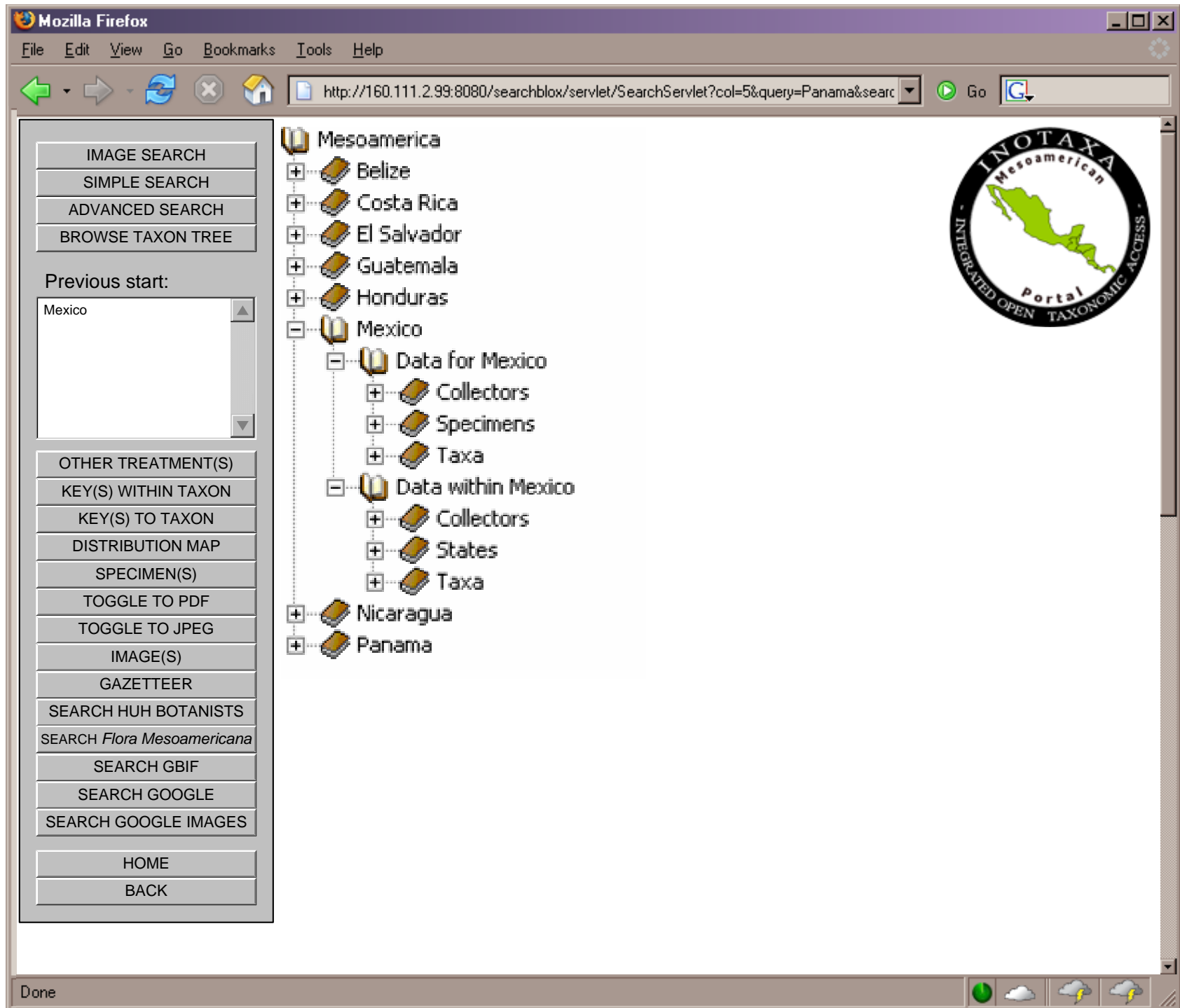


Fig. 13

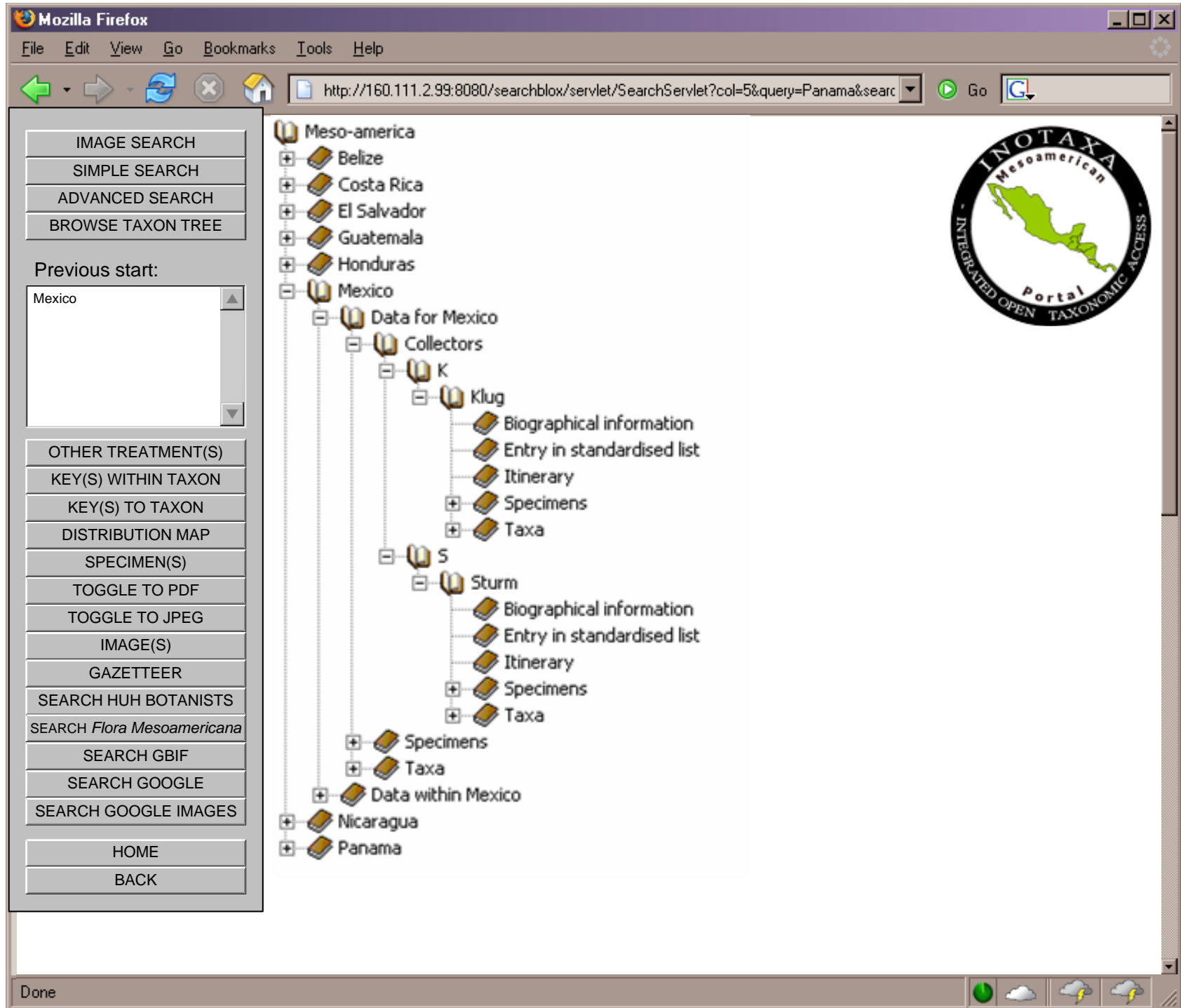










Fig. 17

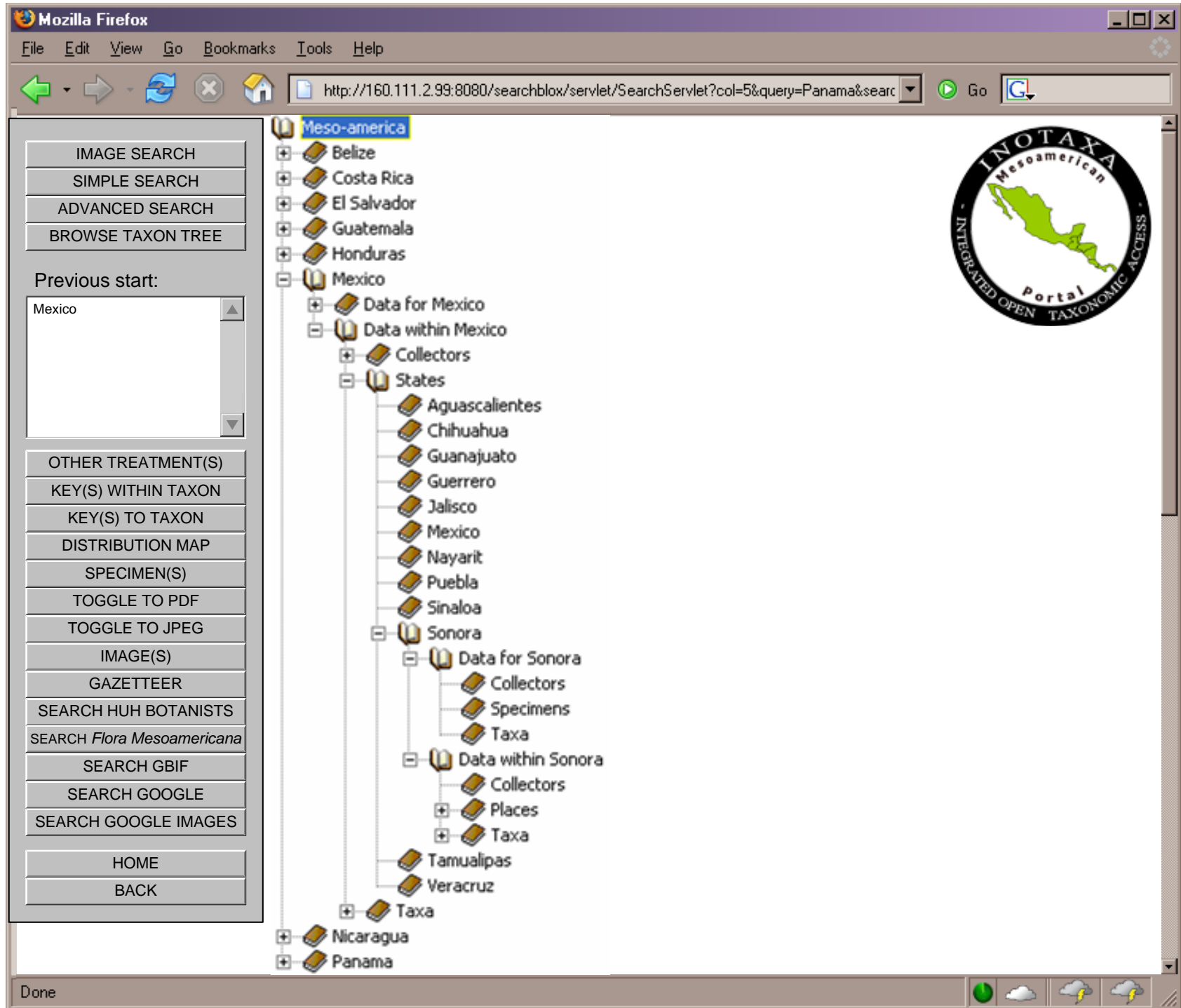


Fig. 18

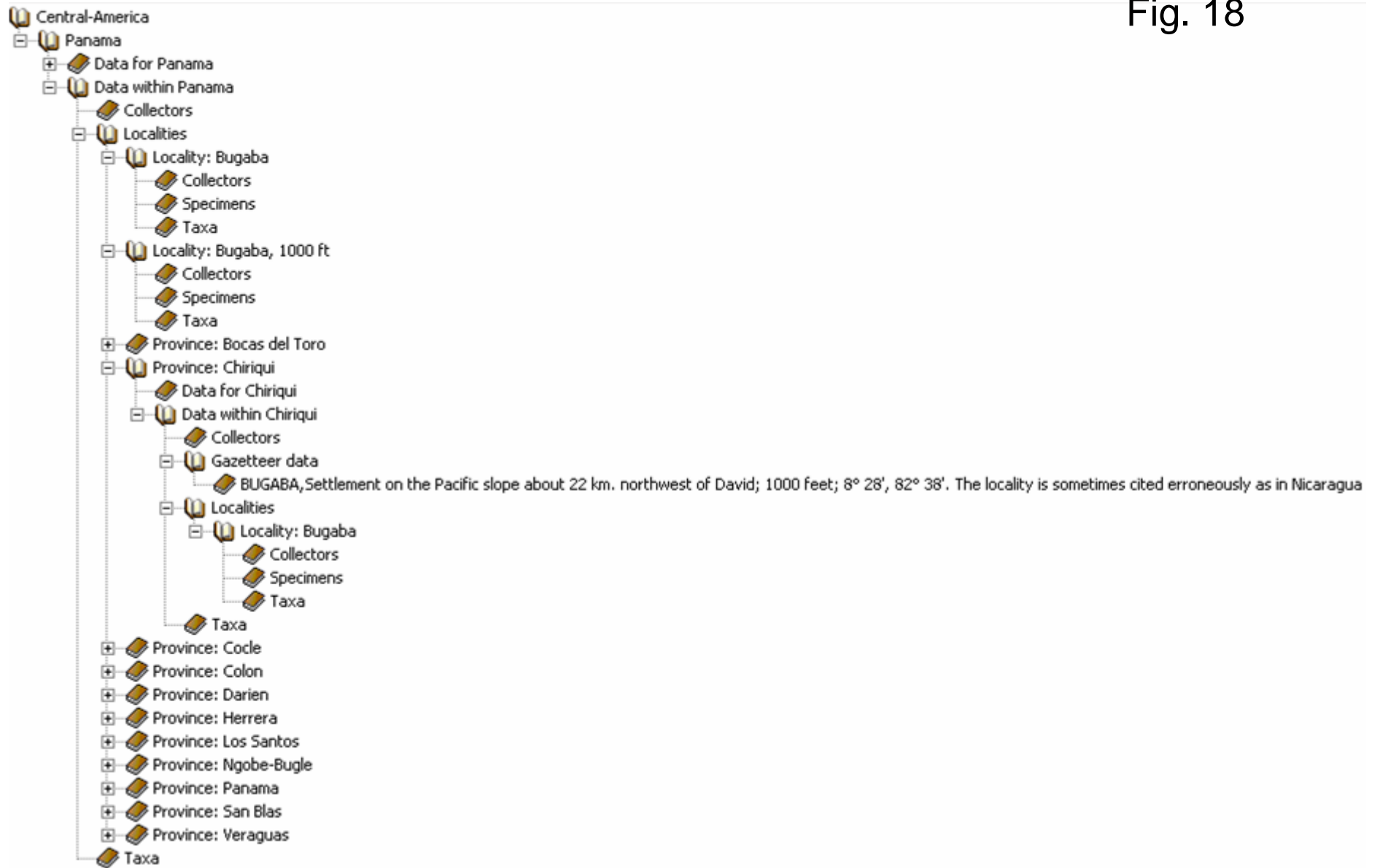


Fig. 19

The screenshot shows a Mozilla Firefox browser window with the following elements:

- Address bar: <http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&searc>
- Page Title: **INOTAXA**  
*Mesoamerican Portal*
- Logo: INOTAXA Mesoamerican Portal INTEGRATED OPEN TAXONOMIC ACCESS
- Image: A stylized white flower with a purple center.
- Section Header: **Biota of MesoAmerica:  
Browse Taxon Tree**
- Form: enter a starting taxon:
- Button: Start browse
- Navigation Buttons: IMAGE SEARCH, SIMPLE SEARCH, ADVANCED SEARCH, BROWSE GEOGRAPHIC TREE, HOME, BACK

Done

Please enter the name of the taxon within which you wish to start browsing. If you do not enter any taxon you will see the root of the BCA tree.

Buttons will appear to enable you to select between classifications, if more than one is available.

On selecting a tree, branches can be opened to reveal lower or higher taxa, and any treatments available.

Buttons enabling comparison of the selected tree with other classifications will appear beneath the alternate classification buttons.

Fig. 20

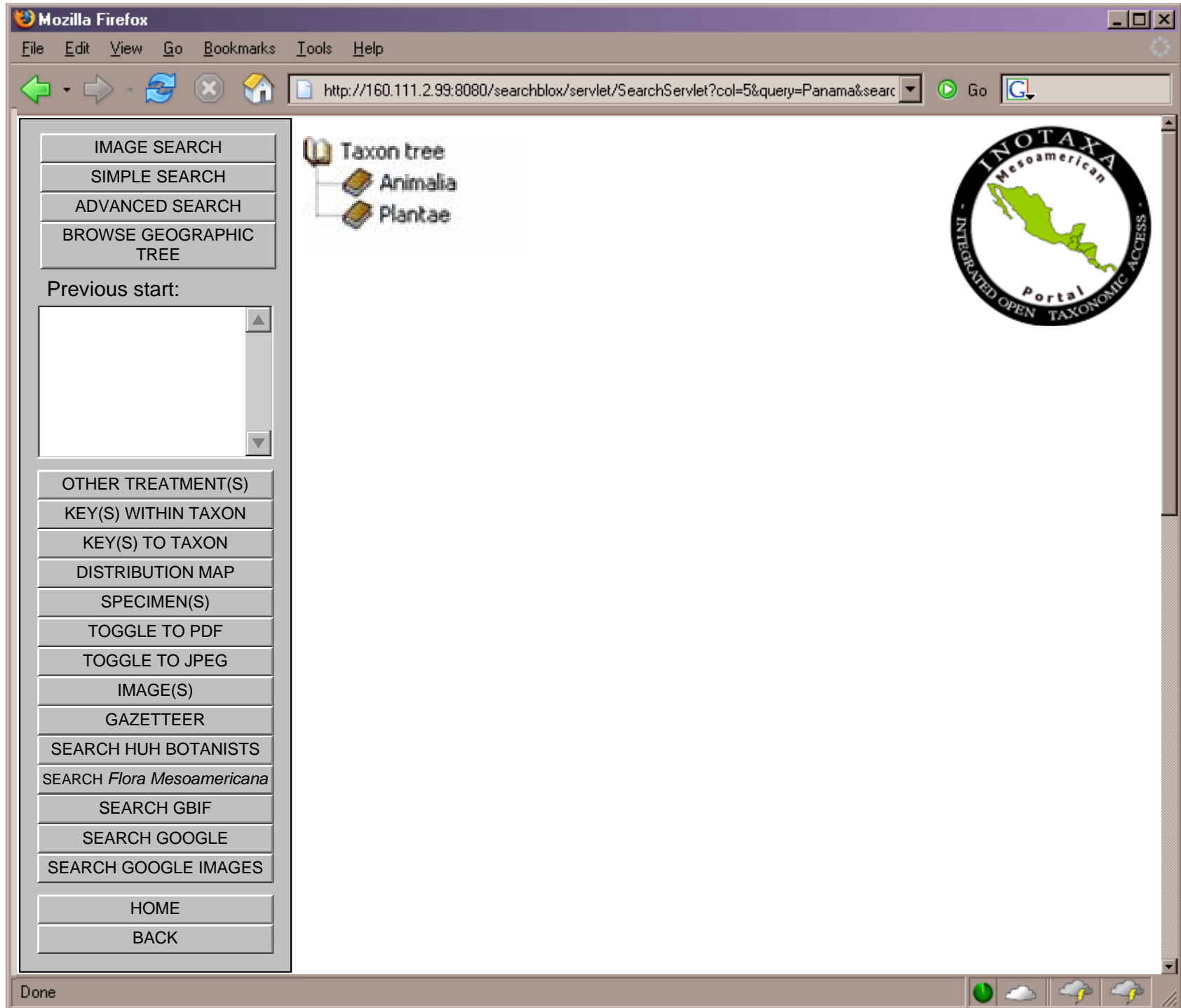


Fig. 21

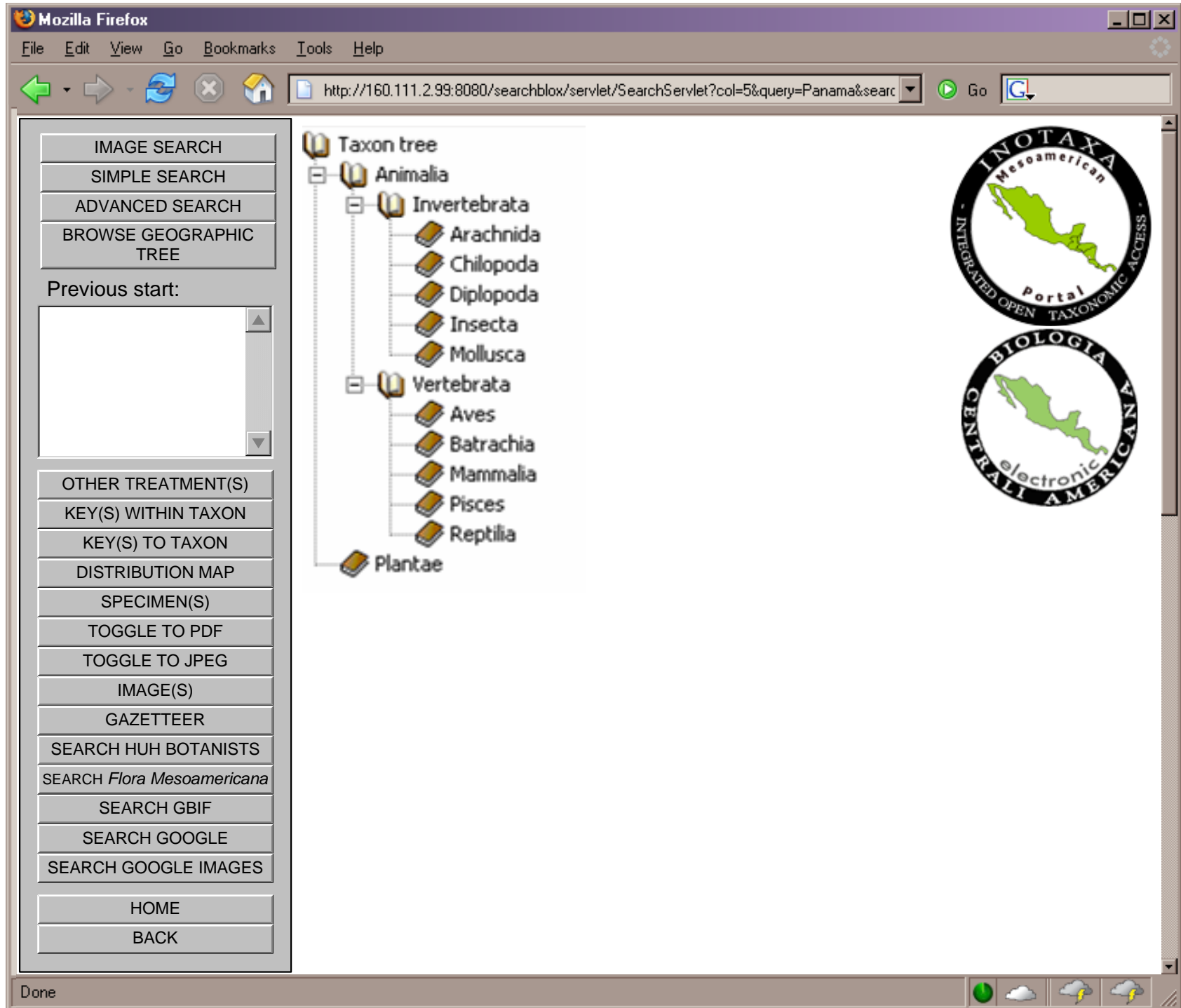


Fig. 22

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http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&search

Go

**Taxon tree**

- Animalia
  - Invertebrata
    - Arachnida
    - Chilopoda
    - Diplopoda
  - Insecta
    - Coleoptera (Beetles)
    - Diptera (Flies)
    - Hymenoptera (Bees, Ants, Wasps)
    - Lepidoptera (Butterflies, Moths)
    - Orthoptera (Crickets, Grasshoppers, Mantids)
    - Rhynchota (Cicadas, Leafhoppers, True Bugs)
  - Mollusca
  - Vertebrata
- Plantae

**INOTAXA**  
Mesoamerican  
Portal  
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**BIOLOGIA AMERICANA**  
CENTRALIA AMERICANA  
electronic

IMAGE SEARCH  
SIMPLE SEARCH  
ADVANCED SEARCH  
BROWSE GEOGRAPHIC TREE

Previous start:

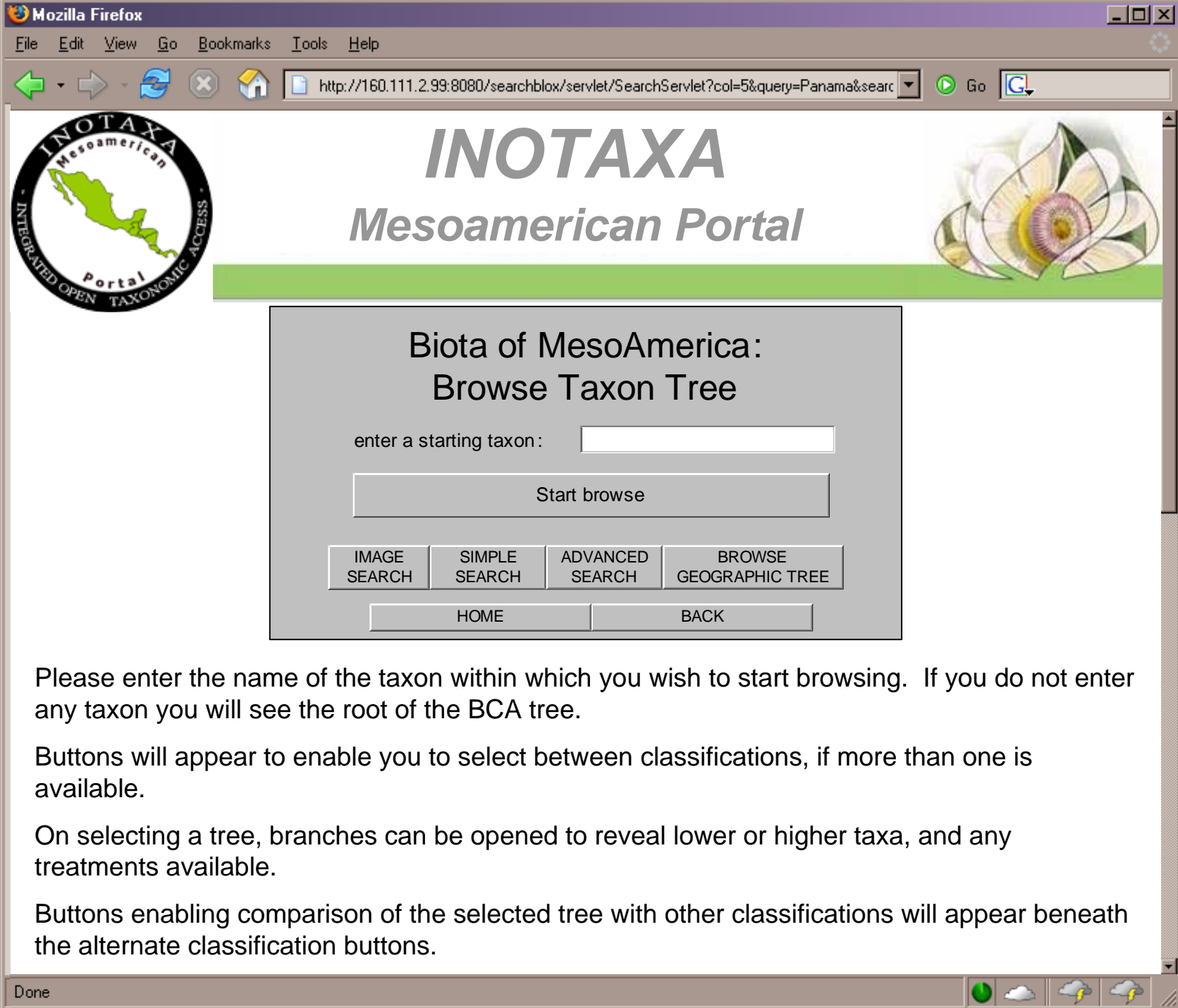
OTHER TREATMENT(S)  
KEY(S) WITHIN TAXON  
KEY(S) TO TAXON  
DISTRIBUTION MAP  
SPECIMEN(S)  
TOGGLE TO PDF  
TOGGLE TO JPEG  
IMAGE(S)  
GAZETTEER  
SEARCH HUH BOTANISTS  
SEARCH *Flora Mesoamericana*  
SEARCH GBIF  
SEARCH GOOGLE  
SEARCH GOOGLE IMAGES

HOME  
BACK

Done



Fig. 23



INOTAXA  
*Mesoamerican Portal*

Biota of MesoAmerica:  
Browse Taxon Tree

enter a starting taxon :

Start browse

IMAGE SEARCH   SIMPLE SEARCH   ADVANCED SEARCH   BROWSE GEOGRAPHIC TREE

HOME   BACK

Please enter the name of the taxon within which you wish to start browsing. If you do not enter any taxon you will see the root of the BCA tree.

Buttons will appear to enable you to select between classifications, if more than one is available.

On selecting a tree, branches can be opened to reveal lower or higher taxa, and any treatments available.

Buttons enabling comparison of the selected tree with other classifications will appear beneath the alternate classification buttons.

Fig. 24

INOTAXA  
Mesoamerican  
Portal  
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# INOTAXA

## Mesoamerican Portal

### Biota of MesoAmerica: Browse Taxon Tree

starting taxon:

Trees available:

BCA classification    O'Brien & Wibmer (1982) classification    Alonso-Zarazaga & Lyal (1999) classification

IMAGE SEARCH    SIMPLE SEARCH    ADVANCED SEARCH    BROWSE GEOGRAPHIC TREE

HOME    BACK

Done

Please select one classification and a tree will appear.

On that tree, branches may be opened to reveal lower or higher taxa, and any treatments available.

Buttons enabling comparison of the selected tree with other classifications will appear along with alternate classification buttons.

Fig. 25

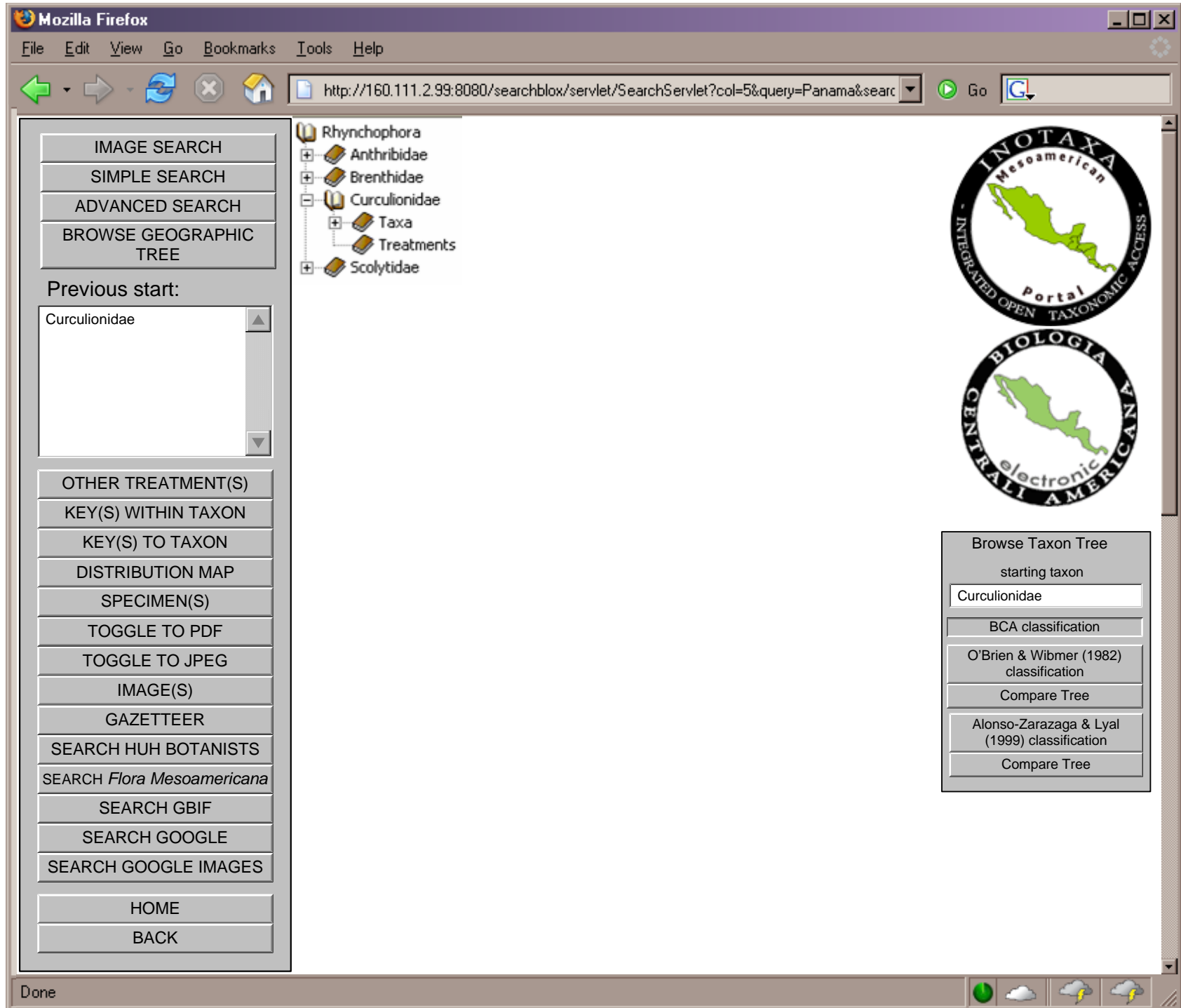


Fig. 26

The screenshot shows a Mozilla Firefox browser window displaying a web application for taxonomic search. The address bar shows the URL: `http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&searc`. The main content area features a taxonomic tree under the heading "Rhynchophora". The tree is expanded to show the family "Curculionidae", which contains a sub-section "Taxa" with the following sub-families: Allocoryninae, Apioninae, Attelabinae, Calandrinae, Curculioninae, Otiorynchinae, Pterocolinae, Rhynchitinae, and Thecesterninae. The "Scolytidae" family is also listed below. To the right of the tree are two circular logos: "INOTAXA Mesoamerican Portal" and "BIOLOGIA CENTRALI AMERICANA electronic". Below these logos is a "Browse Taxon Tree" panel with a "starting taxon" field containing "Curculionidae". The panel includes buttons for "BCA classification", "O'Brien & Wibmer (1982) classification", "Alonso-Zarazaga & Lyal (1999) classification", and "Compare Tree". On the left side of the browser window, there is a sidebar with various search and navigation options: "IMAGE SEARCH", "SIMPLE SEARCH", "ADVANCED SEARCH", "BROWSE GEOGRAPHIC TREE", "Previous start:" (with a dropdown menu showing "Curculionidae"), "OTHER TREATMENT(S)", "KEY(S) WITHIN TAXON", "KEY(S) TO TAXON", "DISTRIBUTION MAP", "SPECIMEN(S)", "TOGGLE TO PDF", "TOGGLE TO JPEG", "IMAGE(S)", "GAZETTEER", "SEARCH HUH BOTANISTS", "SEARCH *Flora Mesoamericana*", "SEARCH GBIF", "SEARCH GOOGLE", "SEARCH GOOGLE IMAGES", "HOME", and "BACK". The browser's status bar at the bottom shows "Done" and system icons.

Fig. 27

Mozilla Firefox

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http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&searc

Go

IMAGE SEARCH  
SIMPLE SEARCH  
ADVANCED SEARCH  
BROWSE GEOGRAPHIC TREE

Previous start:  
Curculionidae

OTHER TREATMENT(S)  
KEY(S) WITHIN TAXON  
KEY(S) TO TAXON  
DISTRIBUTION MAP  
SPECIMEN(S)  
TOGGLE TO PDF  
TOGGLE TO JPEG  
IMAGE(S)  
GAZETTEER  
SEARCH HUH BOTANISTS  
SEARCH *Flora Mesoamericana*  
SEARCH GBIF  
SEARCH GOOGLE  
SEARCH GOOGLE IMAGES

HOME  
BACK

Rhynchophora  
+ Anthribidae  
+ Brenthidae  
- Curculionidae  
- Taxa  
+ Allocoryninae  
+ Apioninae  
+ Attelabinae  
+ Calandrinae  
+ Curculioninae  
+ Otiorynchinae  
- Pterocolinae  
- Taxa  
+ Apterocolus  
- Pterocolus  
- Synonymy  
1 Pterocolus Schonherr, 1833, Gen.Curc.i.p.238  
2 Apotomus Kirby, 1837, Fauna Bor.-Am.iv.p.205  
- Taxa  
- Pterocolus auricollis  
- Distribution  
Mesoamerica: Panama  
- Specimens  
Sharp, 1889 p.44  
Panama, Bugaba  
- Treatments  
Sharp, 1889 p.44 sp.n.  
+ Pterocolus grossus  
- Treatments  
Sharp, 1889 p.44  
- Treatments  
Sharp, 1889, p.43  
+ Rhynchitinae  
+ Thecesterninae  
+ Scolytidae

INOTAXA  
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Browse Taxon Tree  
starting taxon  
Curculionidae  
BCA classification  
O'Brien & Wibmer (1982) classification  
Compare Tree  
Alonso-Zarazaga & Lyal (1999) classification  
Compare Tree

Done

Fig. 28

The screenshot shows a Mozilla Firefox browser window displaying the INOTAXA Mesoamerican Portal. The address bar shows the URL: `http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&searc`. The main content area features a hierarchical tree structure for the genus *Attelabus*, including sections for Synonymy, Taxa, Distribution, Specimens, and Treatments. The Taxa section lists numerous species such as *Attelabus angulipennis*, *Attelabus ater*, *Attelabus auratus*, *Attelabus axillaris*, *Attelabus binotatus*, *Attelabus breviceps*, *Attelabus brevicollis*, *Attelabus bullatus*, *Attelabus callosus*, *Attelabus championi*, *Attelabus conicollis*, *Attelabus coraliinus*, *Attelabus corvinus*, *Attelabus cruralis*, *Attelabus diffinis*, *Attelabus fenestratus*, *Attelabus heteroceris*, *Attelabus inaequalis*, *Attelabus klugi*, *Attelabus laeicollis*, and *Attelabus liuulatus*. The Distribution section includes Mesoamerica: Mexico, and the Specimens section includes From Collections (Mexico (BMNH) 2, Mexico (NRS) 5, Sharp, 1888 p.3) and Mexico, Parada. The Treatments section includes Sharp, 1888 p. 3. The sidebar on the left contains search options: IMAGE SEARCH, SIMPLE SEARCH, ADVANCED SEARCH, BROWSE GEOGRAPHIC TREE, and a 'Previous start:' section with a dropdown menu showing 'Curculionidae'. Below these are buttons for OTHER TREATMENT(S), KEY(S) WITHIN TAXON, KEY(S) TO TAXON, DISTRIBUTION MAP, SPECIMEN(S), TOGGLE TO PDF, TOGGLE TO JPEG, IMAGE(S), GAZETTEER, SEARCH HUH BOTANISTS, SEARCH *Flora Mesoamericana*, SEARCH GBIF, SEARCH GOOGLE, SEARCH GOOGLE IMAGES, HOME, and BACK. On the right side, there are two circular logos: the top one is 'INOTAXA Mesoamerican Portal INTEGRATED OPEN TAXONOMIC ACCESS' and the bottom one is 'BIOLOGIA Mesoamericana CENTRAL AMERICA electronic'. Below the logos is a 'Browse Taxon Tree' panel with a dropdown menu showing 'starting taxon' and 'Curculionidae', and buttons for BCA classification, O'Brien & Wibmer (1982) classification, Compare Tree, Alonso-Zarazaga & Lyal (1999) classification, and Compare Tree. The status bar at the bottom shows 'Done' and system icons.

Fig. 29

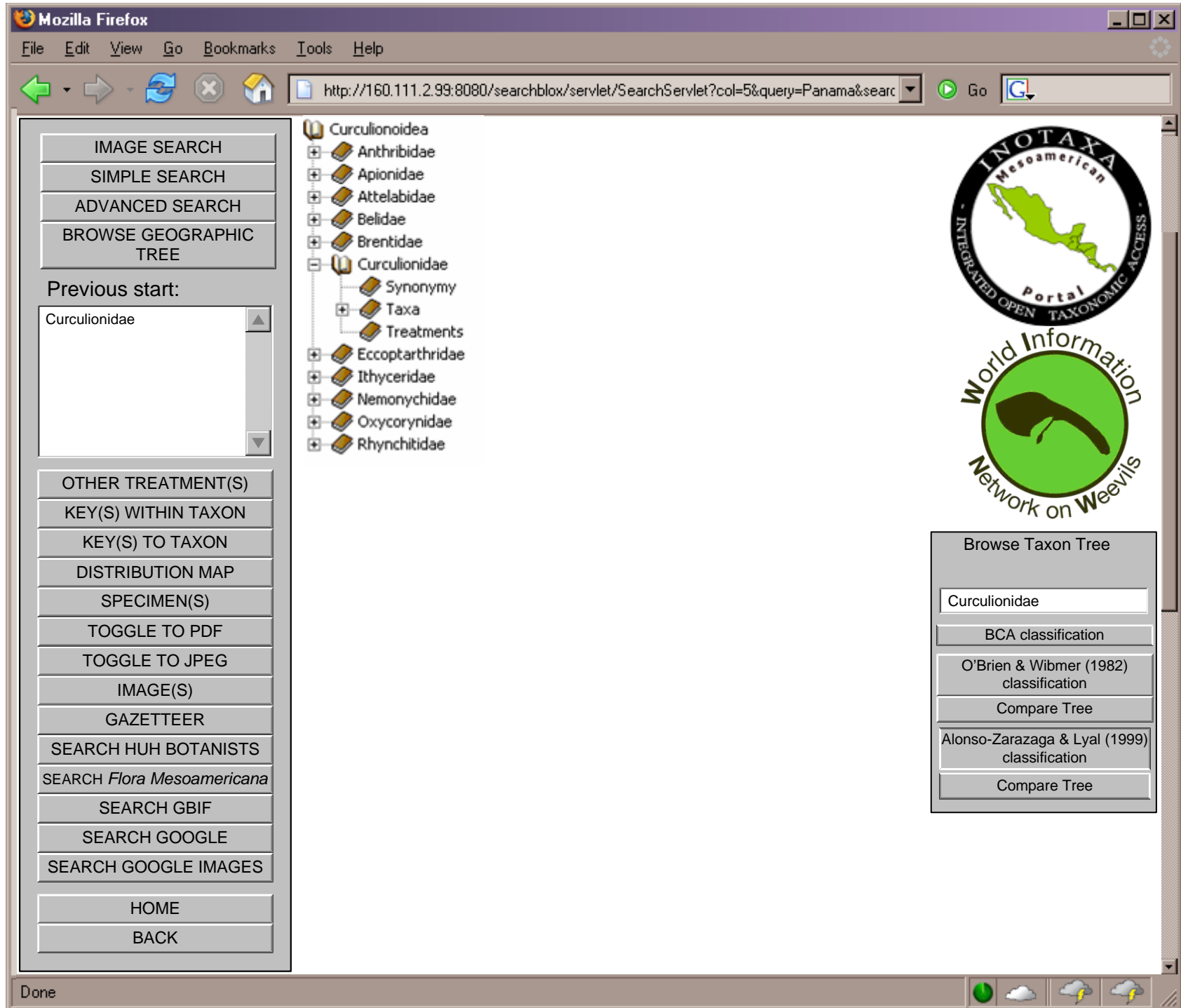


Fig. 30

Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&search

Go

**Rhynchitidae**

- Synonymy
- Taxa
  - Pterocolinae**
    - Synonymy
      - 1 Pterocolides Lacordaire, 1866 (ref to be added) p.190
      - 2 Pterocolinae Lacordaire, 1866 (ref to be added) p.190
      - 3 Pterocolinae Lacordaire; Pascoe, 1870 (ref to be added) p.437
      - 4 Pterocolidae Lacordaire; LeConte, 1876 (ref to be added) p. 9
      - 5 Pterocolini Lacordaire; Morrone, 1998 (ref to be added) p. 132
      - 6 Pterocolinae Lacordaire; Alonso-Zarazaga & Lyal, 1999 (ref to be added)
    - Taxa
      - Apterocolus
      - Pterocolus**
        - Synonymy
          - 1 Pterocolus Say, 1831, Descriptions of new species of Curculionites:
          - 2 Pterocolus Schonherr, 1833, Genera et Species Curculionidum, 1(
          - 3 Apotomus Kirby in Richardson, 1837, Fauna Boreali-Americana, 4 p
        - Taxa
          - Pterocolus amandae
          - Pterocolus auricollis**
            - Distribution
              - Mesoamerica: Costa Rica, Panama (Hamilton, 1998)
              - Mesoamerica: Panama (Sharp, 1890)
            - Specimens
              - From Collections
                - Panama, Bugaba (BMNH) 3
              - Hamilton, 1998 p.222
                - numerous specimens listed-not shown in example
              - Sharp, 1890 p. 44
                - Panama, Bugaba
            - Synonymy
              - Pterocolus auricollis Sharp, 1890, Biologia Centrali-American
            - Treatments
              - Hamilton, 1998 p.222
              - Sharp, 1890 p. 44 sp.n.
          - Pterocolus grossus
        - Treatments
          - Hamilton, 1998 p.210



Fig. 31

Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&searc

INOTAXA Mesoamerican Portal INTEGRATED OPEN TAXONOMIC ACCESS

BIOLOGIA AMERICANA CENTRALI AMERICANA electronic

Curculionidae

OTHER TREATMENT(S)

KEY(S) WITHIN TAXON

KEY(S) TO TAXON

DISTRIBUTION MAP

SPECIMEN(S)

TOGGLE TO PDF

TOGGLE TO JPEG

IMAGE(S)

GAZETTEER

SEARCH HUH BOTANISTS

SEARCH *Flora Mesoamericana*

SEARCH GBIF

SEARCH GOOGLE

SEARCH GOOGLE IMAGES

HOME

BACK

Browse Taxon Tree

starting taxon

Curculionidae

BCA classification

O'Brien & Wibmer (1982) classification

Compare Tree

Alonso-Zarazaga & Lyal (1999) classification

Compare Tree

Rhynchophora

- Anthribidae
- Brenthidae
- Curculionidae
  - Taxa
    - Allocoryninae
      - Taxa
        - Allocorynus
          - Taxa
            - Allocorynus mollis**
              - Distribution
                - Mesoamerica: Mexico (Sharp, 1890)
              - Specimens
                - Sharp, 1890 p.46
                  - Mexico, Chiapas, Tapachula
                  - Mexico, Durango, Ventanas
              - Treatments
                - Sharp, 1890 p.46 sp.n.
            - Treatments
              - Sharp, 1890 p.46 gen.n.
          - Treatments
            - Sharp, 1890 p.45 subfam.n.

- Apioninae
- Attelabinae
- Calandrinae
- Curculioninae
- Otiorhynchinae
- Pterocolinae
- Rhynchitinae
- Thecesterninae
- Scolytidae

Fig. 32

The screenshot shows a Mozilla Firefox browser window displaying a taxonomic search interface. The address bar shows the URL: <http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&search>. The interface is divided into several sections:

- Search Options:** Includes buttons for IMAGE SEARCH, SIMPLE SEARCH, ADVANCED SEARCH, and BROWSE GEOGRAPHIC TREE. A 'Previous start:' section shows 'Curculionidae' in a list.
- Other Treatment(s):** A list of search options including KEY(S) WITHIN TAXON, KEY(S) TO TAXON, DISTRIBUTION MAP, SPECIMEN(S), TOGGLE TO PDF, TOGGLE TO JPEG, IMAGE(S), GAZETTEER, SEARCH HUH BOTANISTS, SEARCH Flora Mesoamericana, SEARCH GBIF, SEARCH GOOGLE, SEARCH GOOGLE IMAGES, HOME, and BACK.
- Taxonomic Tree:** A hierarchical tree structure showing the classification of taxa. The tree is divided into two main columns:
  - Left Column (Rhynchophora):** Includes Anthribidae, Brenthidae, Curculionidae, and Scolytidae. Under Curculionidae, it lists subfamilies like Allocoryninae, Apioninae, Attelabinae, Calandrinae, Curculioninae, Otiorynchinae, Pterocolinae, Rhynchitinae, and Thecesterninae. The 'Taxa' node under Allocoryninae is expanded to show 'Allocorynus mollis' and its associated 'Distribution', 'Mesoamer', 'Specimens', and 'Treatments' (e.g., Sharp, 1890 p.46).
  - Right Column (Curculionoidea):** Includes subfamilies like Anthribidae, Apionidae, Attelabidae, Belidae, Brentidae, Curculionidae, Eccoptarthridae, Ithycteridae, Memonychidae, Oxycorynidae, and Rhynchitidae. The 'Taxa' node under Oxycorynidae is expanded to show 'Rhopalotria mollis' and its associated 'Distribution', 'Specimens', 'Synonymy', and 'Treatments'.
- Logos:** Three circular logos are displayed on the right side:
  - INOTAXA Mesoamerican Portal:** Integrated Open Taxonomic Access.
  - BIOLOGIA Mesoamericana:** Central America electronic.
  - World Information Network on Weevils:** Represented by a green circle with a weevil silhouette.
- Browse Taxon Tree:** A panel at the bottom right with a 'starting taxon' input field containing 'Curculionidae'. It includes buttons for 'BCA classification', 'O'Brien & Wibmer (1982) classification', 'Compare Tree', 'Alonso-Zarazaga & Lyal (1999) classification', and another 'Compare Tree' button.

Fig. 33

The screenshot shows a Mozilla Firefox browser window with the following elements:

- Browser Title Bar:** Mozilla Firefox
- Address Bar:** <http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&search>
- Page Header:**
  - Logo:** INOTAXA Mesoamerican Portal. The logo is circular with a map of Mesoamerica in the center. Text around the map includes "INOTAXA Mesoamerican Portal" and "INTEGRATED OPEN TAXONOMIC ACCESS".
  - Title:** *INOTAXA*  
*Mesoamerican Portal*
  - Image:** A stylized white flower with a purple and yellow center.
- Main Content Area:**
  - Section Header:** Biota of MesoAmerica: Advanced Search
  - Text:** Build a search using available fields; values, and boolean operator(s):
  - Form:** First select a field to search. Below this is a dropdown menu.
  - Ordering:** Order by: [dropdown], then by: [dropdown], [dropdown]
  - Previous search:** [none]
  - Navigation Buttons:** IMAGE SEARCH, SIMPLE SEARCH, BROWSE TAXON TREE, BROWSE GEOGRAPHIC TREE, HOME, BACK
- System Tray:** Done, and weather icons (sun, clouds, lightning).

Fig. 34a. Fields represented in drop down list “select a field to search” on the Advanced search panel in Fig. 33.

Additional fields will be added in a more detailed specification.

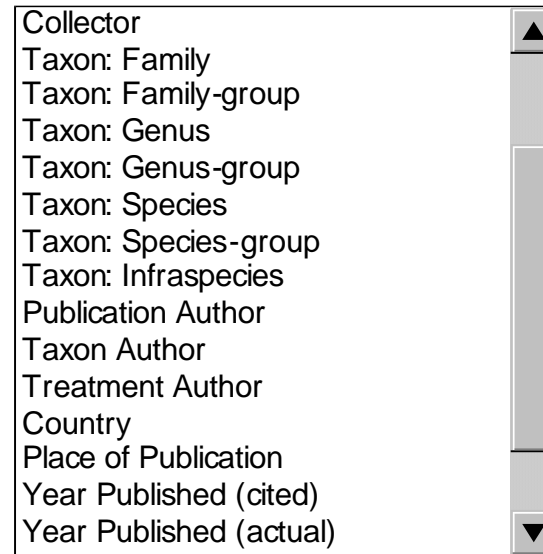
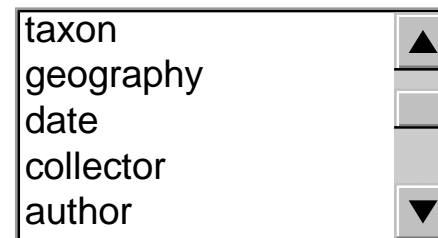


Fig. 34b. Fields represented in each of the drop down lists “Order by” and “then by” on the Advanced search panel in Fig. 33.

The term ‘date’ refers to date of collection when used with a collector, but date of publication when used with a species (treatment date).

Additional terms may be added in a more detailed specification.



## Biota of MesoAmerica: Advanced Search

Build a search using available fields; values, and boolean operator(s):

First select a field to search enter term: select an operator:

Description

Order by:

then by:

Previous search:

Fig. 35. Advanced search panel for a non-indexed field, with search term entered.

## Biota of MesoAmerica: Advanced Search

Build a search using available fields, values, and boolean operator(s):

|  |                                      |                                  |  |
|--|--------------------------------------|----------------------------------|--|
| select a field to search               | select term:                         |                                  | Order by:                                    |
| <input type="text" value="Collector"/> | <input type="text" value="Schiede"/> | <input type="text" value="and"/> | <input type="text" value="taxon"/>           |
| <input type="text"/>                   | <input type="text"/>                 | <input type="text"/>             | then by:                                     |
|  |                                      |                                  | <input type="text" value="geography"/>       |
|  |                                      |                                  | <input type="text" value="collection date"/> |

Previous search:

|   |  |  |   |
|---|--|--|---|
| <input type="button" value="IMAGE SEARCH"/> | <input type="button" value="SIMPLE SEARCH"/> | <input type="button" value="BROWSE TAXON TREE"/> | <input type="button" value="BROWSE GEOGRAPHIC TREE"/> |
| <input type="button" value="HOME"/>         |  | <input type="button" value="BACK"/>              |   |

Fig. 36. Advanced search panel for an indexed field, with term and operator selected (adding an operator brings up an additional row of fields to select/add to).

Fig. 37

The screenshot shows a Mozilla Firefox browser window displaying the INOTAXA Mesoamerican Portal. The browser's address bar shows the URL: `http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&searc`. The page header includes the INOTAXA logo, the text "INOTAXA Mesoamerican Portal", and a decorative image of a flower. The main content area is titled "Biota of MesoAmerica: Advanced Search" and contains a search form with the following elements:

- Instruction: "Build a search using available fields, values, and boolean operator(s):"
- Form fields:
  - "select a field to search": dropdown menu with "Collector" selected.
  - "select term:": dropdown menu with "Schiede" selected.
  - "select an operator:": empty dropdown menu.
  - "SEARCH": button.
  - "Order by:": dropdown menu with "taxon" selected.
  - "then by:": dropdown menu with "geography" selected.
  - "collection date": dropdown menu.
- "Previous search: [none]" text input field.
- Navigation buttons: "IMAGE SEARCH", "SIMPLE SEARCH", "BROWSE TAXON TREE", "BROWSE GEOGRAPHIC TREE", "HOME", and "BACK".

The browser's status bar at the bottom shows "Done" and system icons for network, volume, and weather.

Fig. 38

**Mozilla Firefox**

File Edit View Go Bookmarks Tools Help

http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&search

**Advanced Search:**  
 select one or more choices below:  
 REFINE PREVIOUS START NEW  
 select operator:  
 select field:  
 enter/choose term:  
 select operator:  
**SEARCH**  
 order by:  
 then by:  
 IMAGE SEARCH  
 SIMPLE SEARCH  
 BROWSE TAXON TREE  
 BROWSE GEOGRAPHIC TREE  
 Previous search:  
 Collector contains "Schiede"; order by "taxon name" then by "geography" then by "collection date"  
 OTHER TREATMENT(S)  
 KEY(S) WITHIN TAXON  
 KEY(S) TO TAXON  
 DISTRIBUTION MAP  
 SPECIMEN(S)  
 TOGGLE TO PDF  
 TOGGLE TO JPEG  
 IMAGE(S)  
 GAZETTEER  
 SEARCH HUH BOTANISTS  
 SEARCH *Flora Mesoamericana*  
 SEARCH GBIF  
 SEARCH GOOGLE  
 SEARCH GOOGLE IMAGES  
 HOME BACK

**Collector Schiede**

- Ternstroemiaceae**
  - Cleyera**
    - Cleyera serrulata Choisy
      - Kobuski, 1941b
    - Cleyera theaeoides (Swartz) Choisy
      - Weitzman, 2006
  - Freziera**
    - Freziera theoides Sw.
  - Ternstroemia**
    - Ternstroemia sylvatica Ch. et Schl.
      - Hemsley, 1879
    - Ternstroemia sylvatica Schlechtendal & Chamisso
      - Kobuski, 1942
    - Ternstroemia tepezapote Ch. et Schl.
      - Hemsley, 1879
    - Ternstroemia tepezapote Schlechtendal & Chamisso
      - Kobuski, 1942

**INOTAXA Mesoamerican Portal**  
 INTEGRATED OPEN TAXONOMIC ACCESS

Done



Fig. 39

The screenshot shows a Mozilla Firefox browser window displaying the INOTAXA Mesoamerican Portal search results for the query 'Panama'. The browser's address bar shows the URL: `http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&searc`. The INOTAXA logo is visible in the top right corner, featuring a map of Mesoamerica and the text 'INOTAXA Mesoamerican Portal INTEGRATED OPEN TAXONOMIC ACCESS'.

The search results are organized into a hierarchical tree structure under the heading 'Collector Schiede'. The tree includes the following main categories and sub-items:

- Ternstroemiaceae**
  - Cleyera**
    - Cleyera serrulata Choisy**
      - Kobuski, 1941b
        - Mexico
          - Hidalgo
            - vicinity of Chiconquiaco
              - Schiede & Deppe 325 (MO)
      - Cleyera theaeoides (Swartz) Choisy**
        - Weitzman, 2006
          - Mexico
            - Veracruz
              - Cuesta Grande Jalacingo
                - Schiede (Oct 1828; K; MEXU, photo of K)
                - Schiede & Deppe (Dec 1828, BM)
              - prope Chiconquiaco
                - Schiede & Deppe 326 (BM, MO, P)
  - Freziera**
    - Freziera theoides Sw.**
      - Hemsley, 1879
        - Mexico
          - Cuesta Grande de Jalacingo
            - Schiede & Deppe
          - near Chiconquiaco
            - Schiede
- Ternstroemia**
  - Ternstroemia sylvatica Ch. et Schl.**
    - Hemsley, 1879
  - Ternstroemia sylvatica Schlechtendal & Chamisso**
    - Kobuski, 1942
  - Ternstroemia tepezapote Ch. et Schl.**
    - Hemsley, 1879
  - Ternstroemia tepezapote Schlechtendal & Chamisso**
    - Kobuski, 1942

The left sidebar contains an 'Advanced Search' section with various filters and options, including 'select one or more choices choices below:', 'select operator:', 'select field:', 'enter/choose term:', 'order by:', 'then by:', and several search buttons like 'IMAGE SEARCH', 'SIMPLE SEARCH', 'BROWSE TAXON TREE', etc. The bottom status bar shows 'Done' and system icons.

Fig. 40

The screenshot shows a Mozilla Firefox browser window with the address bar containing the URL: `http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&search`. The search results page is titled "results 1 - x of XXXX" and features a circular logo for "INOTAXA Mesoamerican Portal" with the text "INTEGRATED OPEN TAXONOMIC ACCESS" around a map of Mesoamerica.

On the left side of the browser window, there is an "Advanced Search" sidebar with various options:
 

- REFINE PREVIOUS / START NEW
- select operator: [dropdown]
- select field: [dropdown]
- enter/choose term: [input]
- select operator: [dropdown]
- SEARCH button
- order by: [dropdown]
- then by: [dropdown]
- IMAGE SEARCH
- SIMPLE SEARCH
- BROWSE TAXON TREE
- BROWSE GEOGRAPHIC TREE
- Previous search: Genus-group equals "Ophryastes"
- OTHER TREATMENT(S)
- KEY(S) WITHIN TAXON
- KEY(S) TO TAXON
- DISTRIBUTION MAP
- SPECIMEN(S)
- TOGGLE TO PDF
- TOGGLE TO JPEG
- IMAGE(S)
- GAZETTEER
- SEARCH HUH BOTANISTS
- SEARCH *Flora Mesoamericana*
- SEARCH GBIF
- SEARCH GOOGLE
- SEARCH GOOGLE IMAGES
- HOME / BACK buttons

The search results are listed as follows:

- [Ophryastes - Key Sharp, 1899 p. 88 \(2\)](#)  
 ....Genera *Ophryastes*, *Tosastes*, *Caccophryastes*, and....*imperfectly cavernous*. *Ophryastes*.  
[Ophryastes Sharp, 1899 p. 88 \(4\)](#)  
*Ophryastes*...*Ophryastes* (part)....*Ophryastes*, Leconte & Horn...*Ophryastes* is peculiar...
- [Ophryastes – Treatment Sharp, 1899 p.88](#) *Ophryastes wickhami*, sp.n.
- [Ophryastes – Treatment Sharp, 1899 p.89](#) 1. *Ophryastes latipennis*, sp.n.
- [Ophryastes – Treatment Sharp, 1899 p.89](#) 2. *Ophryastes strumosus*....
- [Ophryastes – Treatment Sharp, 1899 p.89](#) 3. *Ophryastes basalis*, sp.n.
- [Ophryastes – Treatment Sharp, 1899 p.89](#) 3. *Ophryastes basalis*, sp.n.
- [Ophryastes – Treatment Sharp, 1899 p.90](#) 4. *Ophryastes bitubrosus*, sp.n.....importance in *Ophryastes* – I think....
- [Ophryastes – Treatment Sharp, 1899 p.90](#) 5. *Ophryastes ovipennis*, sp.n.
- [Ophryastes – Treatment Sharp, 1899 p.90](#) 6. *Ophryastes validus*.....

Ophryastes - Keyed Sharp, 1899 p. 88  
Ophryastes - Keyed Sharp, 1899 p. 88  
Ophryastes - Treatment Sharp, 1899 p. 88  
Ophryastes - Primary Citation Sharp, 1899 p. 88  
Ophryastes – Synonym Sharp, 1899 p. 88  
Ophryastes – Discussion Sharp, 1899 p. 88  
Ophryastes – Treatment Sharp, 1899 p.88  
Ophryastes – Treatment Sharp, 1899 p.89  
Ophryastes – Treatment Sharp, 1899 p.89  
Ophryastes – Treatment Sharp, 1899 p.89  
Ophryastes – Treatment Sharp, 1899 p.90  
Ophryastes – Discussion Sharp, 1899 p. 90  
Ophryastes – Treatment Sharp, 1899 p.90  
Ophryastes – Treatment Sharp, 1899 p.90  
Ophryastes – Treatment Sharp, 1899 p.90  
Ophryastes – Treatment Sharp, 1899 p.90  
Ophryastes - Discussion Sharp, 1899 p. 91  
Ophryastes - Discussion Sharp, 1899 p. 91  
Ophryastes - Discussion Sharp, 1899 p. 91  
Ophryastes - Discussion Sharp, 1899 p. 92  
Ophryastes - Discussion Sharp, 1899 p. 92  
Ophryastes - Discussion Sharp, 1899 p. 93  
Ophryastes - Discussion Sharp, 1899 p. 93  
Ophryastes - Discussion Sharp, 1899 p. 93  
Ophryastes - Treatment Sharp, 1899 p. 318

Fig. 41a. Occurrences of '*Ophryastes*' in BCA v.4.pt.3

*Apion ocellator* Sharp; Sharp, 1899  
*Barynotus obliquefasciatus* Sturm; Sharp, 1899  
*Auletobius optatus* Sharp; Sharp, 1899  
*Auletobius optatus* Sharp, 1899  
*Cloeoteges obliterated* Champion; Sharp, 1899  
*Cloeoteges obliterated* Champion; Sharp, 1899  
*Cloeoteges obliterated* Sharp, 1899  
*Curculio greaviyi obliterated* Pelsue, 2004  
*Curculio octotuberculatus* F.; Sharp, 1899  
*Epagrius operculatus* Say; Sharp, 1899  
*Epagrius operculatus* Sharp, 1899  
*Epagrius operculatus* Sharp, 1899  
*Graphorhinus operculatus* Say; Sharp, 1899  
*Epagrius operculatus* Sharp, 1899

Fig. 41b. Drop-down list of species/subspecies in the 'choose term' combo box with just the letter 'o' entered.

Fig. 42

The screenshot shows a Mozilla Firefox browser window displaying the INOTAXA Mesoamerican Portal search results for the query 'Panama'. The browser's address bar shows the URL: `http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&searc`. The search results are organized into a hierarchical tree structure:

- Mexico
  - Chihuahua
    - Alamos
      - From Collections
        - species 1, Mexico, Chihuahua, Alamos (BMNH) 10
        - species 2, Mexico, Chihuahua, Alamos (BMNH) 1
        - species 3, Mexico, Chihuahua, Alamos (BMNH) 5
        - species 4, Mexico, Chihuahua, Alamos (BMNH) 11
      - Selander & Vaurie, 1962 p.19
      - Sharp, 1899 p.19
      - Sharp, 1899 p.23
      - Sharp, 1899 p.24
      - Sharp, 1899 p.26.
- Sonora
  - Alamos
    - From Collections
      - species 1, Mexico, Sonora, Alamos (BMNH) 1
      - species 2, Mexico, Sonora, Alamos (BMNH) 2
      - species 3, Mexico, Sonora, Alamos (BMNH) 18
    - Selander & Vaurie, 1962 p.19
    - Sharp, 1899 p.15
    - Sharp, 1899 p.26
    - Sharp, 1899 p.278

The left sidebar contains an 'Advanced Search' section with various options and a 'SEARCH' button. Below the search section are several buttons for additional actions: OTHER TREATMENT(S), KEY(S) WITHIN TAXON, KEY(S) TO TAXON, DISTRIBUTION MAP, SPECIMEN(S), TOGGLE TO PDF, TOGGLE TO JPEG, IMAGE(S), GAZETTEER, SEARCH HUH BOTANISTS, SEARCH *Flora Mesoamericana*, SEARCH GBIF, SEARCH GOOGLE, SEARCH GOOGLE IMAGES, HOME, and BACK. The bottom status bar shows 'Done' and system tray icons.

Fig. 43

Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&search

Go

**Advanced Search:**  
select one or more choices below:  
REFINE PREVIOUS START NEW  
select operator:  
select field:  
enter/choose term:  
select operator:  
**SEARCH**  
order by:  
then by:  
IMAGE SEARCH  
SIMPLE SEARCH  
BROWSE TAXON TREE  
BROWSE GEOGRAPHIC TREE  
Previous search:  
Detailed location equals "Alvares"; order by "geography" then by "treatment author" then by "publication date"  
OTHER TREATMENT(S)  
KEY(S) WITHIN TAXON  
KEY(S) TO TAXON  
DISTRIBUTION MAP  
SPECIMEN(S)  
TOGGLE TO PDF  
TOGGLE TO JPEG  
IMAGE(S)  
GAZETTEER  
SEARCH HUH BOTANISTS  
SEARCH *Flora Mesoamericana*  
SEARCH GBIF  
SEARCH GOOGLE  
SEARCH GOOGLE IMAGES  
HOME BACK

Mexico  
Mexico  
Alvares Mountains  
Champion, 1892 p.425  
From Collections  
Selander & Vaurie, 1962 p.20

**INOTAXA**  
Mesoamerican  
Portal  
INTEGRATED OPEN TAXONOMIC ACCESS

Done

Fig. 44

Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&search

Go

**Advanced Search:**  
select one or more choices below:  
REFINE PREVIOUS START NEW  
select operator:  
select field:  
enter/choose term:  
select operator:  
**SEARCH**  
order by:  
then by:  
IMAGE SEARCH  
SIMPLE SEARCH  
BROWSE TAXON TREE  
BROWSE GEOGRAPHIC TREE  
Previous search:  
Detailed location equals "Alvares"; order by "geography" then by "treatment author" then by "publication date"  
OTHER TREATMENT(S)  
KEY(S) WITHIN TAXON  
KEY(S) TO TAXON  
DISTRIBUTION MAP  
SPECIMEN(S)  
TOGGLE TO PDF  
TOGGLE TO JPEG  
IMAGE(S)  
GAZETTEER  
SEARCH HUH BOTANISTS  
SEARCH *Flora Mesoamericana*  
SEARCH GBIF  
SEARCH GOOGLE  
SEARCH GOOGLE IMAGES  
HOME BACK

Mexico  
Mexico  
Alvares Mountains  
Champion, 1892 p.425  
From Collections  
Selander & Vaurie, 1962 p.20

INOTAXA  
Mesoamerican  
Portal  
INTEGRATED OPEN TAXONOMIC ACCESS

AMERICAN MUSEUM OF NATURAL HISTORY

Done

Selander & Vaurie, 1962, A Gazetteer to Accompany the "Insecta" volumes of the "Biologia Centrali-Americana"

ALVARES MOUNTAINS. See Alvarez Mountains

ALVAREZ MOUNTAINS, SAN LUIS POTOSI, MEXICO. A Palmer locality name, probably referring to the low mountains east of the city of San Luis Potosi. In this area there are a railroad station and settlement of Alvarez 35 km. southeast of the city and a village of Alvares 29 km. east of the city. The state is not given in the "Biologia"; Champion (Coleoptera, vol. 4, pt. 2, p. 425) indicates that the locality is in northern Mexico.

Fig. 45

The screenshot shows a Mozilla Firefox browser window displaying a search results page. The address bar shows the URL: `http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&searc`. The search results are organized into a tree structure:

- Treatment author Sharp
  - Rhynchites Herbst
    - Rhynchites chiriquensis Sharp
      - Sharp, 1889 p.22
    - Rhynchites flaviventris Sharp
      - Sharp, 1889 p.23
    - Rhynchites pusillus Sharp
      - Sharp, 1899 p.22
    - Rhynchites rufiventris Jekel
      - Jekel, 1899 p.23
    - Rhynchites thesaurus Sharp
      - Sharp, 1899 p.22
    - Sharp, 1889 p.16

On the right side of the page, there are two circular logos. The top one is for "INOTAXA Mesoamerican Portal" with the tagline "INTEGRATED OPEN TAXONOMIC ACCESS". The bottom one is for "BIOLOGIA CENTRALI AMERICANA" with the tagline "electronic".

The left sidebar contains an "Advanced Search" section with various filters and options:

- REFINE PREVIOUS / START NEW
- select operator: [dropdown]
- select field: [dropdown]
- enter/choose term: [input field]
- select operator: [dropdown]
- SEARCH button
- order by: [dropdown]
- then by: [dropdown]
- IMAGE SEARCH
- SIMPLE SEARCH
- BROWSE TAXON TREE
- BROWSE GEOGRAPHIC TREE
- Previous search: Treatment author equals "Sharp"; order by "taxon name"
- OTHER TREATMENT(S)
- KEY(S) WITHIN TAXON
- KEY(S) TO TAXON
- DISTRIBUTION MAP
- SPECIMEN(S)
- TOGGLE TO PDF
- TOGGLE TO JPEG
- IMAGE(S)
- GAZETTEER
- SEARCH HUH BOTANISTS
- SEARCH *Flora Mesoamericana*
- SEARCH GBIF
- SEARCH GOOGLE
- SEARCH GOOGLE IMAGES
- HOME / BACK

The status bar at the bottom shows "Done" and system icons for network, volume, and weather.

Fig. 46

The screenshot shows a Mozilla Firefox browser window displaying a search results page. The address bar shows the URL: `http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&searc`. The search results are as follows:

- Taxon Author Sharp
  - Rhynchites Herbst
    - Rhynchites chiriquensis Sharp
      - Sharp, 1889 p.22
    - Rhynchites flaviventris Sharp
      - Sharp, 1889 p.23
    - Rhynchites pusillus Sharp
      - Sharp, 1899 p.22
    - Rhynchites thesaurus Sharp
      - Sharp, 1899 p.22

The left sidebar contains the following search options:

- Advanced Search: select one or more choices choices below:
  - REFINE PREVIOUS | START NEW
  - select operator: [dropdown]
  - select field: [dropdown]
  - enter/choose term: [input]
  - select operator: [dropdown]
  - SEARCH
  - order by: [dropdown]
  - then by: [dropdown]
  - IMAGE SEARCH
  - SIMPLE SEARCH
  - BROWSE TAXON TREE
  - BROWSE GEOGRAPHIC TREE
  - Previous search: Taxon author equals "Sharp"; order by "taxon name"
  - OTHER TREATMENT(S)
  - KEY(S) WITHIN TAXON
  - KEY(S) TO TAXON
  - DISTRIBUTION MAP
  - SPECIMEN(S)
  - TOGGLE TO PDF
  - TOGGLE TO JPEG
  - IMAGE(S)
  - GAZETTEER
  - SEARCH HUH BOTANISTS
  - SEARCH Flora Mesoamericana
  - SEARCH GBIF
  - SEARCH GOOGLE
  - SEARCH GOOGLE IMAGES
  - HOME | BACK

The INOTAXA Mesoamerican Portal logo is visible in the top right corner, featuring a map of Mesoamerica and the text "INTEGRATED OPEN TAXONOMIC ACCESS".



Fig. 47

**Mozilla Firefox** \_ □ ×

File Edit View Go Bookmarks Tools Help

http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&searc Go

**Advanced Search:**  
select one or more choices below:  
REFINE PREVIOUS START NEW  
select operator:  
or  
select field:  
Taxon author  
enter/choose term:  
Jekel  
select operator:  
**SEARCH**  
order by:  
then by:  
IMAGE SEARCH  
SIMPLE SEARCH  
BROWSE TAXON TREE  
BROWSE GEOGRAPHIC TREE  
Previous search:  
Taxon author equals "Sharp"; order by "taxon name"  
OTHER TREATMENT(S)  
KEY(S) WITHIN TAXON  
KEY(S) TO TAXON  
DISTRIBUTION MAP  
SPECIMEN(S)  
TOGGLE TO PDF  
TOGGLE TO JPEG  
IMAGE(S)  
GAZETTEER  
SEARCH HUH BOTANISTS  
SEARCH *Flora Mesoamericana*  
SEARCH GBIF  
SEARCH GOOGLE  
SEARCH GOOGLE IMAGES  
HOME BACK

**Taxon Author Sharp**

- [-] **Rhynchites Herbst**
  - [-] Rhynchites chiriquensis Sharp  
Sharp, 1889 p.22
  - [-] Rhynchites flaviventris Sharp  
Sharp, 1889 p.23
  - [-] Rhynchites pusillus Sharp  
Sharp, 1899 p.22
  - [-] Rhynchites thesaurus Sharp  
Sharp, 1899 p.22

**INOTAXA Mesoamerican Portal**  
INTEGRATED OPEN TAXONOMIC ACCESS

Done 🟢 ☁️ ⚡️ ⚡️

Fig. 48

The screenshot shows a Mozilla Firefox browser window displaying the INOTAXA Mesoamerican Portal search results. The address bar shows the URL: `http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&search`. The search results are organized into a tree structure under the heading "Taxon Author Sharp or Jekel".

- Rhynchites Herbst
  - Rhynchites chiriquensis Sharp
    - Sharp, 1889 p.22
  - Rhynchites pusillus Sharp
    - Sharp, 1889 p.22
  - Rhynchites rufiventris Jekel
    - Jekel 1899 p.23
  - Rhynchites thesaurus Sharp
    - Sharp, 1889 p.22
  - Thynchites flaviventris Sharp
    - Sharp, 1889 p.23

The left sidebar contains an "Advanced Search" section with various options and a "Previous search" section showing the current search criteria: "Treatment author equals 'Sharp' or 'Jekel'; order by 'taxon name'". The bottom of the browser window shows the "Done" status and system tray icons.

Fig. 49

**Mozilla Firefox** \_ □ ×

File Edit View Go Bookmarks Tools Help

http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&searc Go

**Advanced Search:**  
select one or more choices below:  
REFINE PREVIOUS START NEW  
select operator:  
select field:  
Taxon name  
enter/choose term:  
Freziera  
select operator:  
and  
**SEARCH**  
order by:  
Taxon name  
then by:  
Treatment author  
Publication date  
IMAGE SEARCH  
SIMPLE SEARCH  
BROWSE TAXON TREE  
BROWSE GEOGRAPHIC TREE  
Previous search:  
Treatment author equals "Sharp" or "Jekel"; order by "taxon name"  
OTHER TREATMENT(S)  
KEY(S) WITHIN TAXON  
KEY(S) TO TAXON  
DISTRIBUTION MAP  
SPECIMEN(S)  
TOGGLE TO PDF  
TOGGLE TO JPEG  
IMAGE(S)  
GAZETTEER  
SEARCH HUH BOTANISTS  
SEARCH *Flora Mesoamericana*  
SEARCH GBIF  
SEARCH GOOGLE  
SEARCH GOOGLE IMAGES  
HOME BACK

**Taxon Author Sharp**

- [-] **Rhynchites Herbst**
  - [-] Rhynchites chiriquensis Sharp  
Sharp, 1889 p.22
  - [-] Rhynchites flaviventris Sharp  
Sharp, 1889 p.23
  - [-] Rhynchites pusillus Sharp  
Sharp, 1899 p.22
  - [-] Rhynchites thesaurus Sharp  
Sharp, 1899 p.22

**INOTAXA Mesoamerican Portal**  
INTEGRATED OPEN TAXONOMIC ACCESS

Done 🟢 ☁️ ⚡️ ⚡️

Fig. 50

The screenshot shows a Mozilla Firefox browser window with the address bar displaying `http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&searc`. The main content area of the browser displays the message: "Search criteria incomplete, please continue to build search".

In the top right corner of the browser window, there is a circular logo for the INOTAXA Mesoamerican Portal. The logo features a map of Central America and the text "INOTAXA Mesoamerican Portal" and "INTEGRATED OPEN TAXONOMIC ACCESS".

On the left side of the browser window, there is a sidebar with the following sections:

- Advanced Search:** select one or more choices below:
  - REFINE PREVIOUS / START NEW
  - select operator: [dropdown]
  - select field: Taxon author [dropdown]
  - enter/choose term: Kobuski [dropdown]
  - select operator: [dropdown]
  - SEARCH
  - order by: Taxon name [dropdown]
  - then by: Treatment author [dropdown] / Publication date [dropdown]
  - IMAGE SEARCH
  - SIMPLE SEARCH
  - BROWSE TAXON TREE
  - BROWSE GEOGRAPHIC TREE
- Previous search:** Taxon equals "Freziera" and [...]; order by "taxon" then "Treatment author" then "publication date"
- OTHER TREATMENT(S)
- KEY(S) WITHIN TAXON
- KEY(S) TO TAXON
- DISTRIBUTION MAP
- SPECIMEN(S)
- TOGGLE TO PDF
- TOGGLE TO JPEG
- IMAGE(S)
- GAZETTEER
- SEARCH HUH BOTANISTS
- SEARCH *Flora Mesoamericana*
- SEARCH GBIF
- SEARCH GOOGLE
- SEARCH GOOGLE IMAGES
- HOME / BACK

Fig. 51

The screenshot shows a Mozilla Firefox browser window displaying a search results page. The address bar shows the URL: <http://160.111.2.99:8080/searchblox/servlet/SearchServlet?col=5&query=Panama&search>. The search results are displayed in a tree view under the heading "Ternstroemiaceae".

**Ternstroemiaceae**

- Freziera Willd.**
  - Freziera friedrichsthaliana (Szyszylowicz) Kobuski**
    - Kobuski, 1941 p. xxx
    - Weitzman, 2005 p. xx
  - Freziera guatemalensis (J.D. Smith) Kobuski**
    - Kobuski, 1941 p. xxx
    - Weitzman, 2005 p. xx
  - Freziera lancifolia (Standley) Kobuski**
    - Kobuski, 1941 p. xxx
    - Weitzman, 2005 p. xx as synonym of *Freziera grisebachii* Krug & Urban

On the right side of the page, there is a circular logo for INOTAXA Mesoamerican Portal. The logo features a map of Central America and the text "INTEGRATED OPEN TAXONOMIC ACCESS".

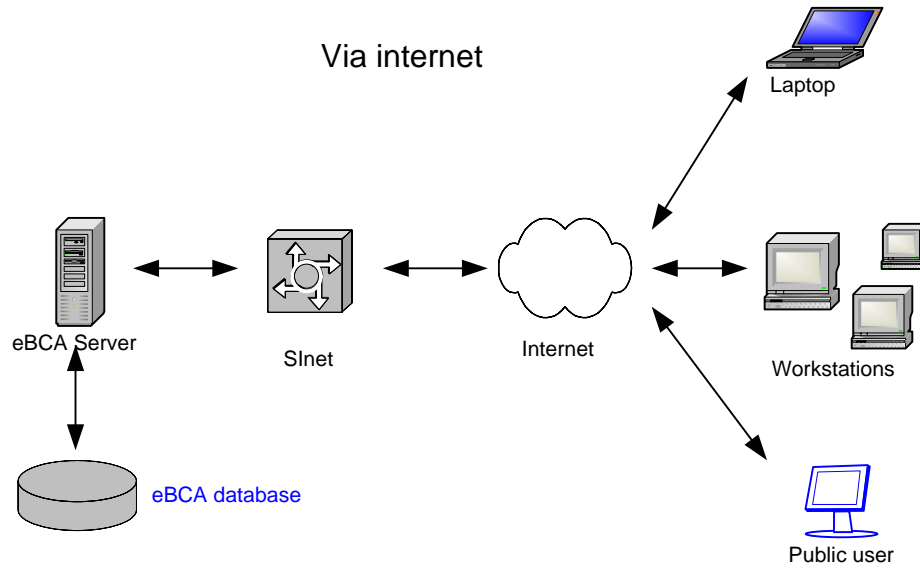
The left sidebar contains an "Advanced Search" section with various options:

- REFINE PREVIOUS
- START NEW
- select operator:
- select field:
- enter/choose term:
- select operator:
- SEARCH
- order by:
- then by:
- IMAGE SEARCH
- SIMPLE SEARCH
- BROWSE TAXON TREE
- BROWSE GEOGRAPHIC TREE
- Previous search: Taxon equals "Freziera" and taxon author equals "Kobuski"; order by "taxon" then "Treatment author" then "publication date"
- OTHER TREATMENT(S)
- KEY(S) WITHIN TAXON
- KEY(S) TO TAXON
- DISTRIBUTION MAP
- SPECIMEN(S)
- TOGGLE TO PDF
- TOGGLE TO JPEG
- IMAGE(S)
- GAZETTEER
- SEARCH HUH BOTANISTS
- SEARCH *Flora Mesoamericana*
- SEARCH GBIF
- SEARCH GOOGLE
- SEARCH GOOGLE IMAGES
- HOME
- BACK

The status bar at the bottom shows "Done" and system icons for network, volume, and power.

Fig. 52

INOTAXA information delivery



Portable access

