Use cases of Keyword Explorer

General policy

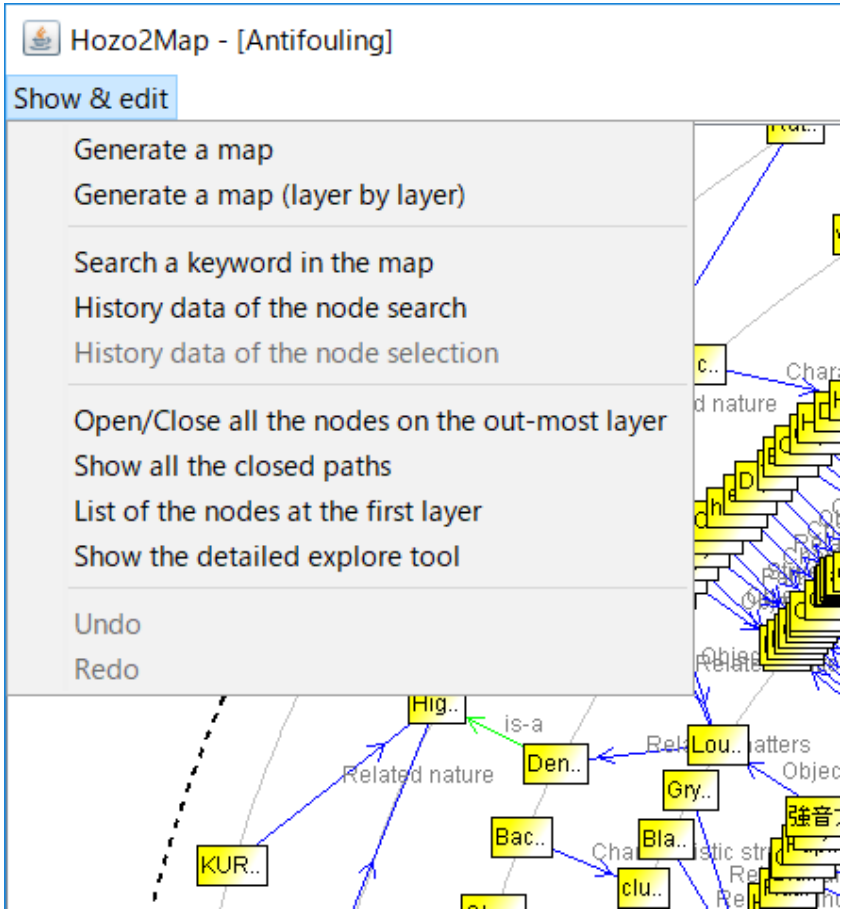
(1) First of all, please have a rough idea about all the commands

- There are three kinds of commands found in:
  - (a) the pull-down menu
  - (b) the pop-up menu by right-clicking **a node**
  - (c) the pop-up menu by right-clicking **the blank (empty) region** of the map

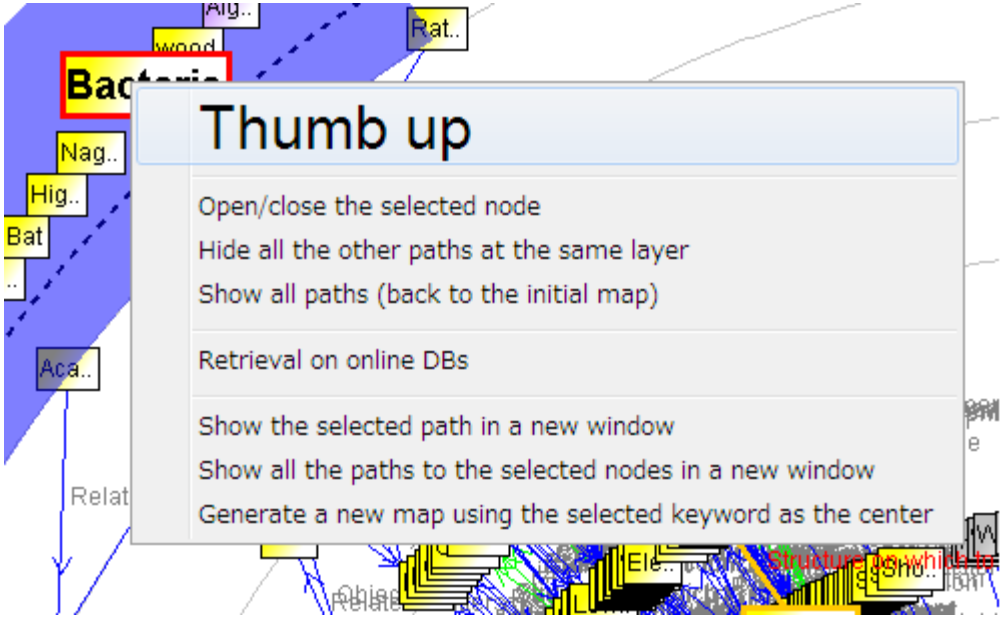
- Roughly speaking (see next slides for detail),
  - Kind (a) commands include functions for generating a map, retrieval and histories of operations
  - Kind (b) commands include functions specific directly to the selected node, and
  - Kind (c) commands include such functions that apply to the whole map

(2) Then, follow the typical use cases below to capture how this tool works

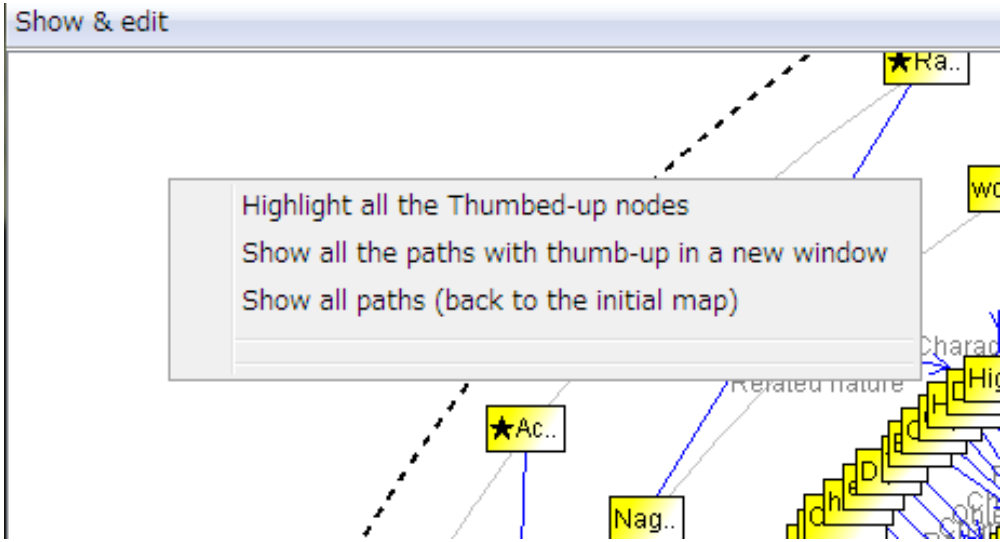
(a) Generic commands



(b) Node specific commands

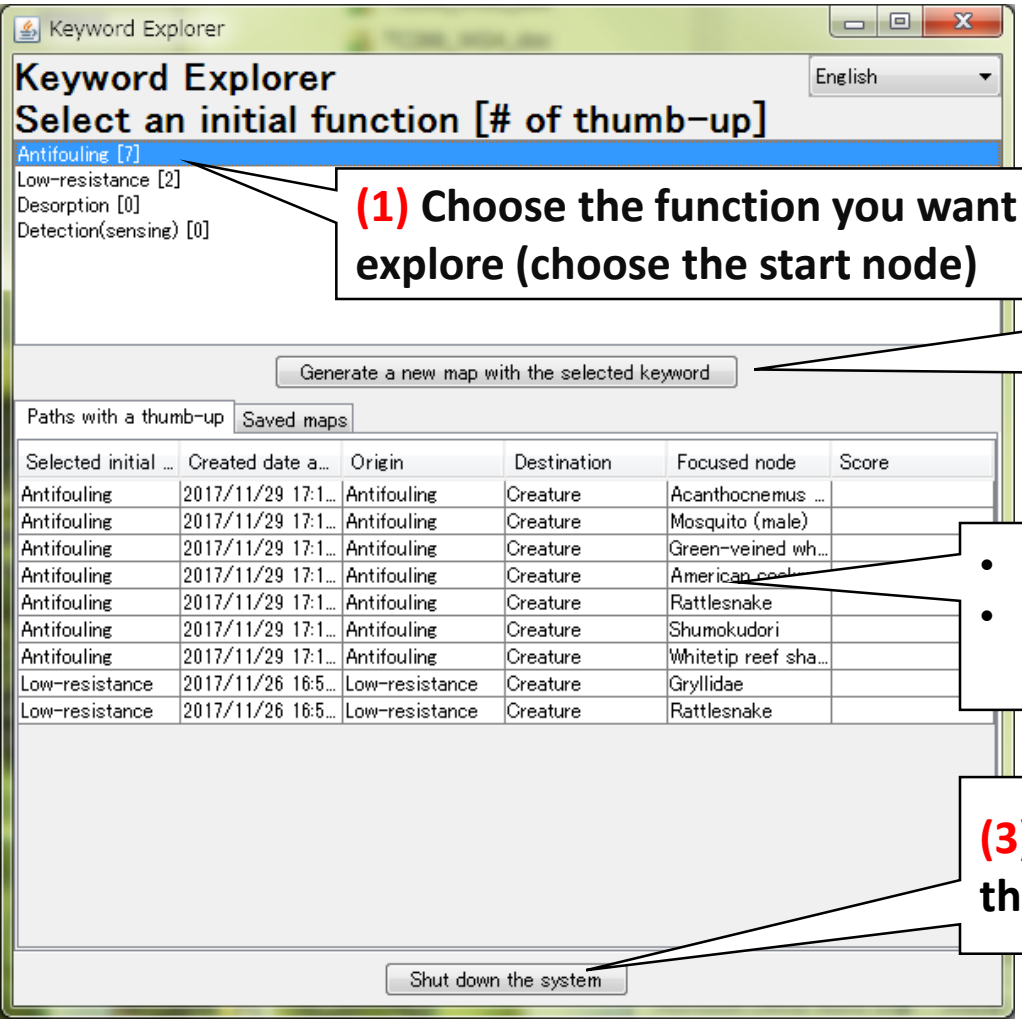


(c) Commands for the whole map



Use cases of Keyword Explorer

This is the start up screen



(1) Choose the function you want to explore (choose the start node)

(2) Press this button to start up this tool

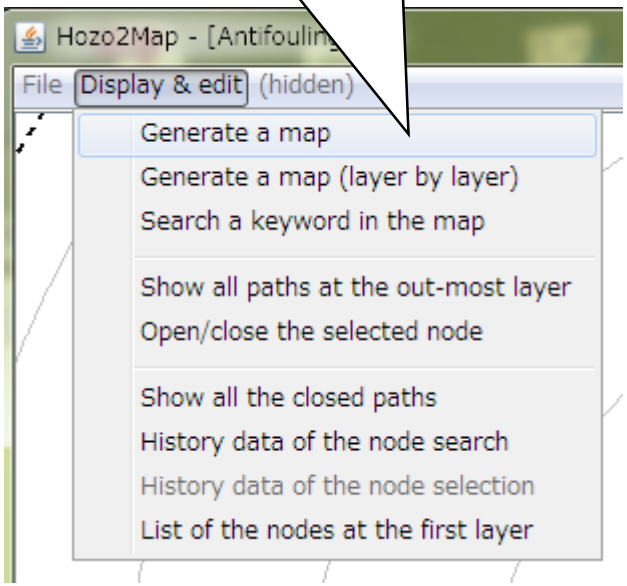
- Information of the saved maps is displayed
- The map is displayed by double-clicking the corresponding item

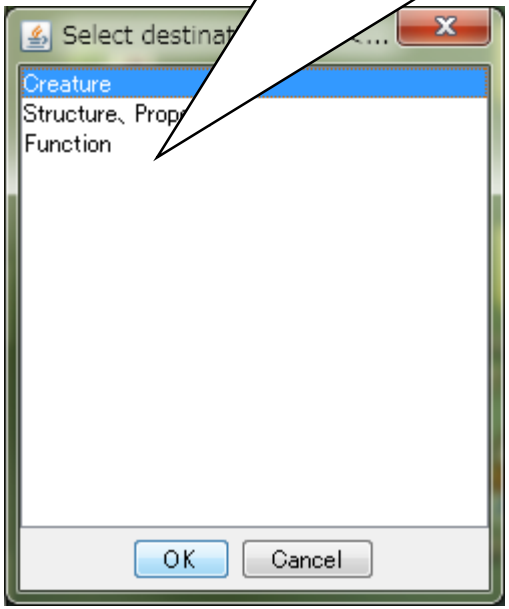
(3) Press this button to shut down this tool

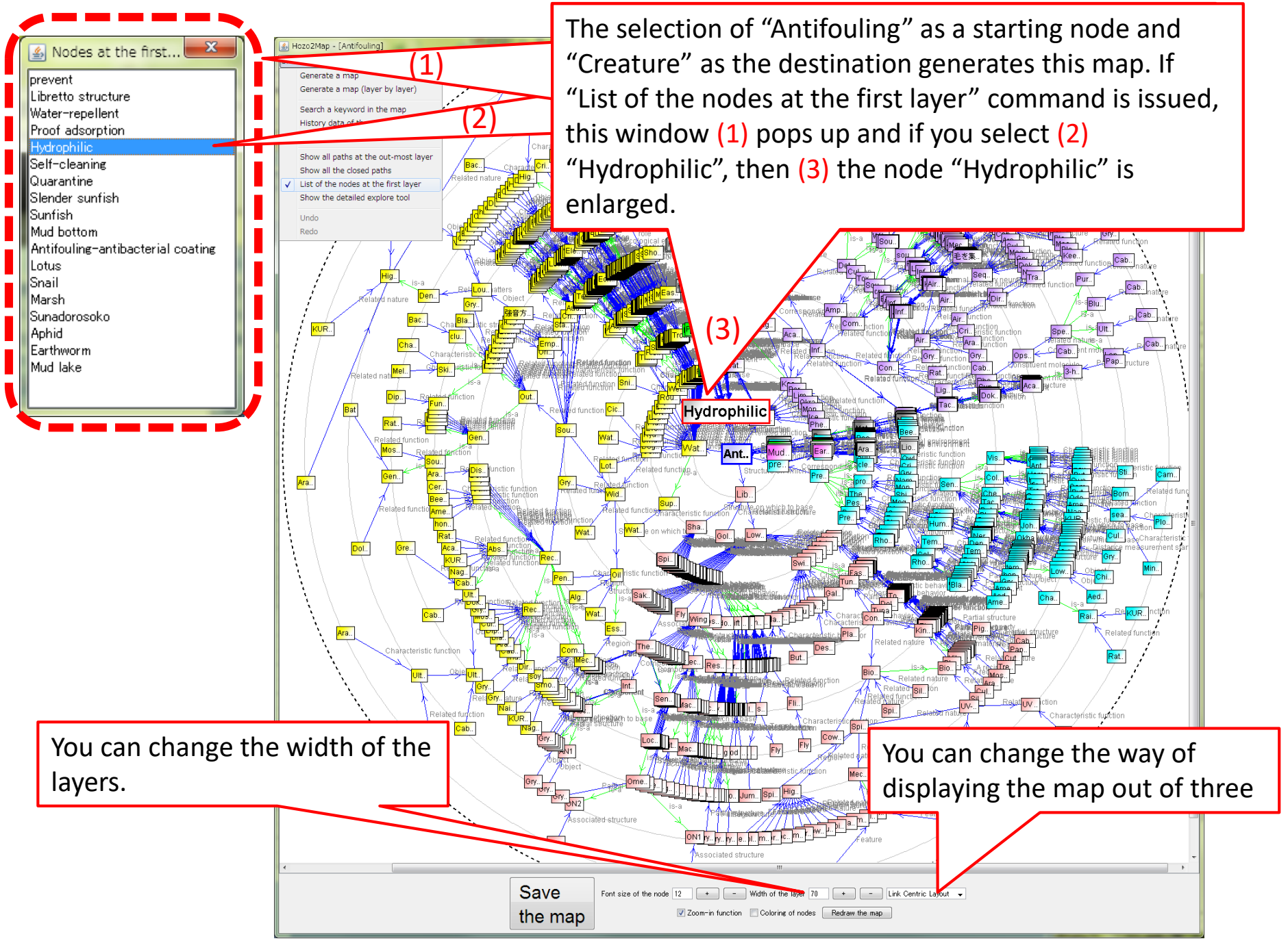
Generate a map

Select “Generate a map” command from the pull-down menu of “Display & edit”

Select one out of the three as the destination (the terminal node) of the path shown in a window which appears at the upper left corner and press OK button. “Creature” is recommended. When “Creature” is selected, then the map shown in the next slide will appear.







The selection of “Antifouling” as a starting node and “Creature” as the destination generates this map. If “List of the nodes at the first layer” command is issued, this window (1) pops up and if you select (2) “Hydrophilic”, then (3) the node “Hydrophilic” is enlarged.

You can change the width of the layers.

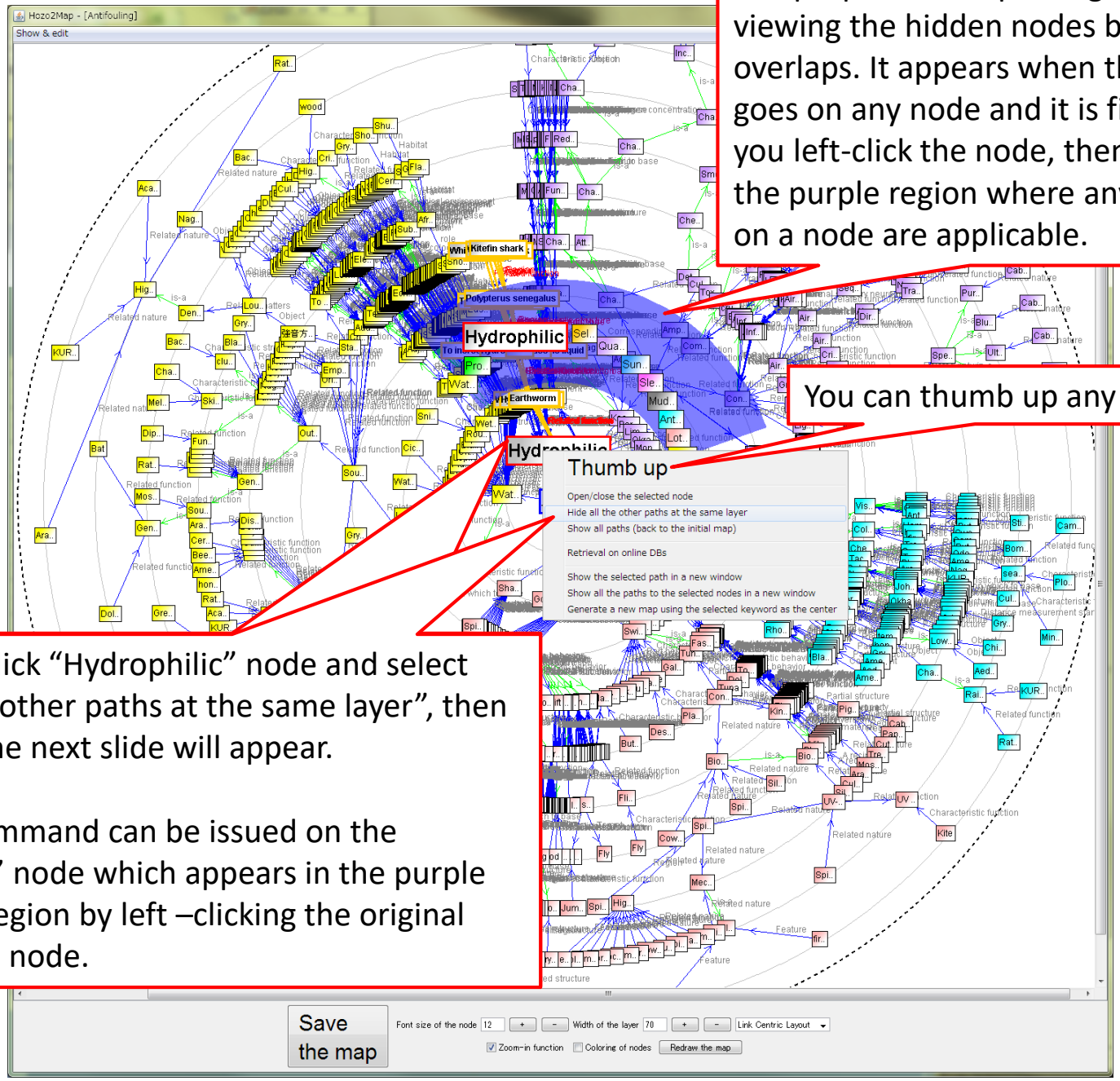
You can change the way of displaying the map out of three

The purple fan-shaped region is for viewing the hidden nodes because of overlaps. It appears when the cursor goes on any node and it is fixed when you left-click the node, then you go to the purple region where any operations on a node are applicable.

You can thumb up any node.

If you right-click “Hydrophilic” node and select “Hide all the other paths at the same layer”, then the map in the next slide will appear.

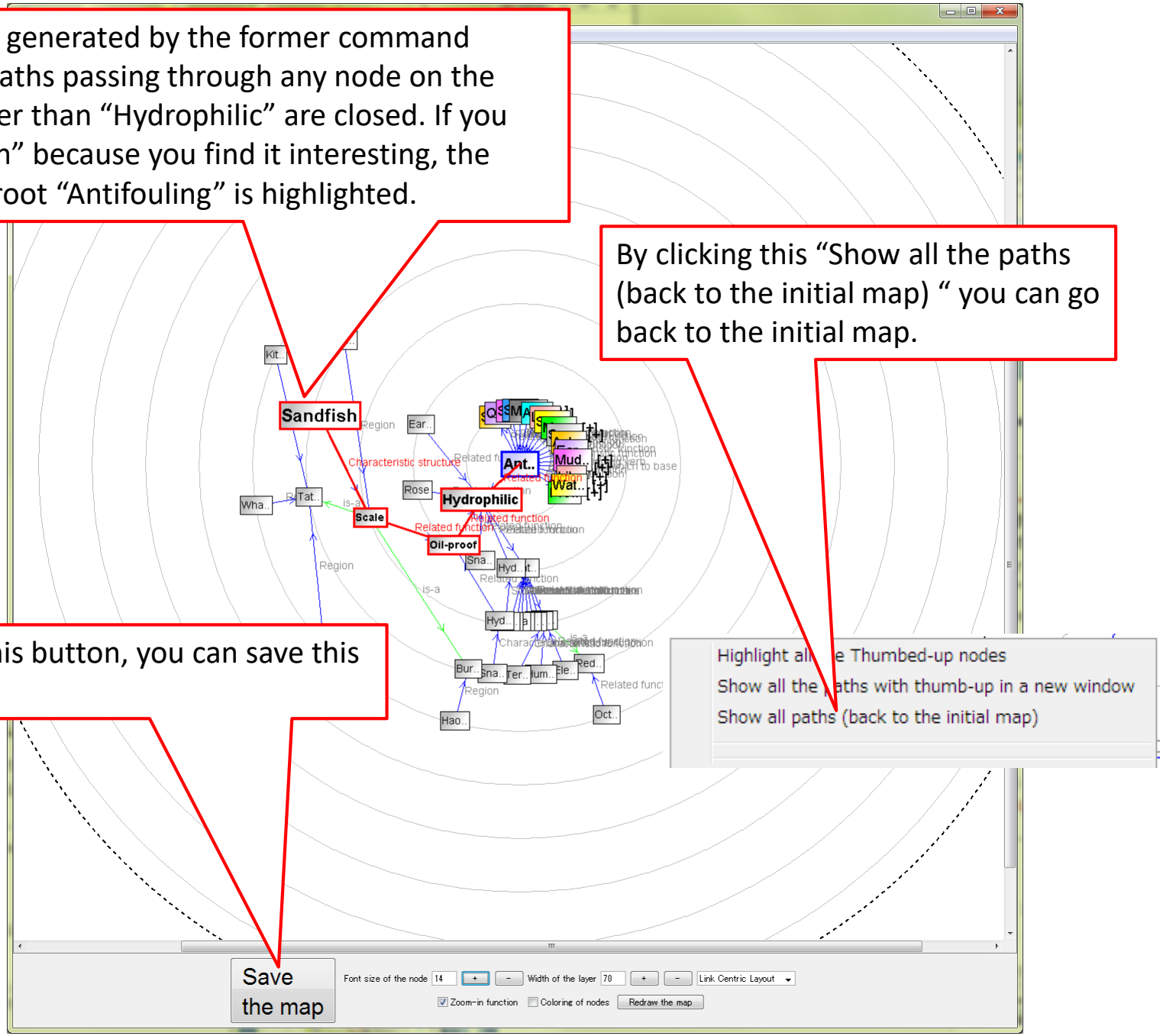
The same command can be issued on the “Hydrophilic” node which appears in the purple fan-shaped region by left –clicking the original “hydrophilic” node.

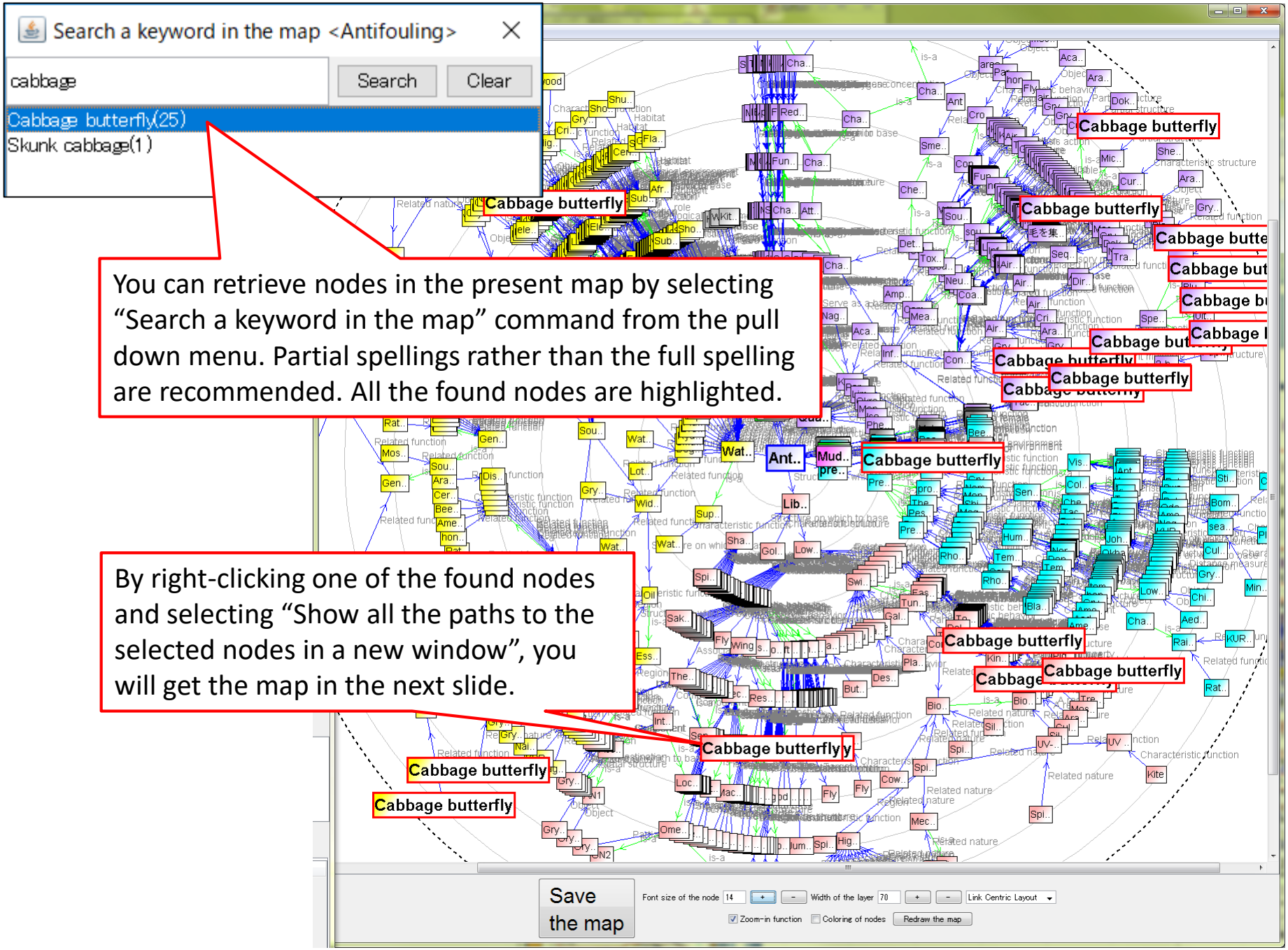


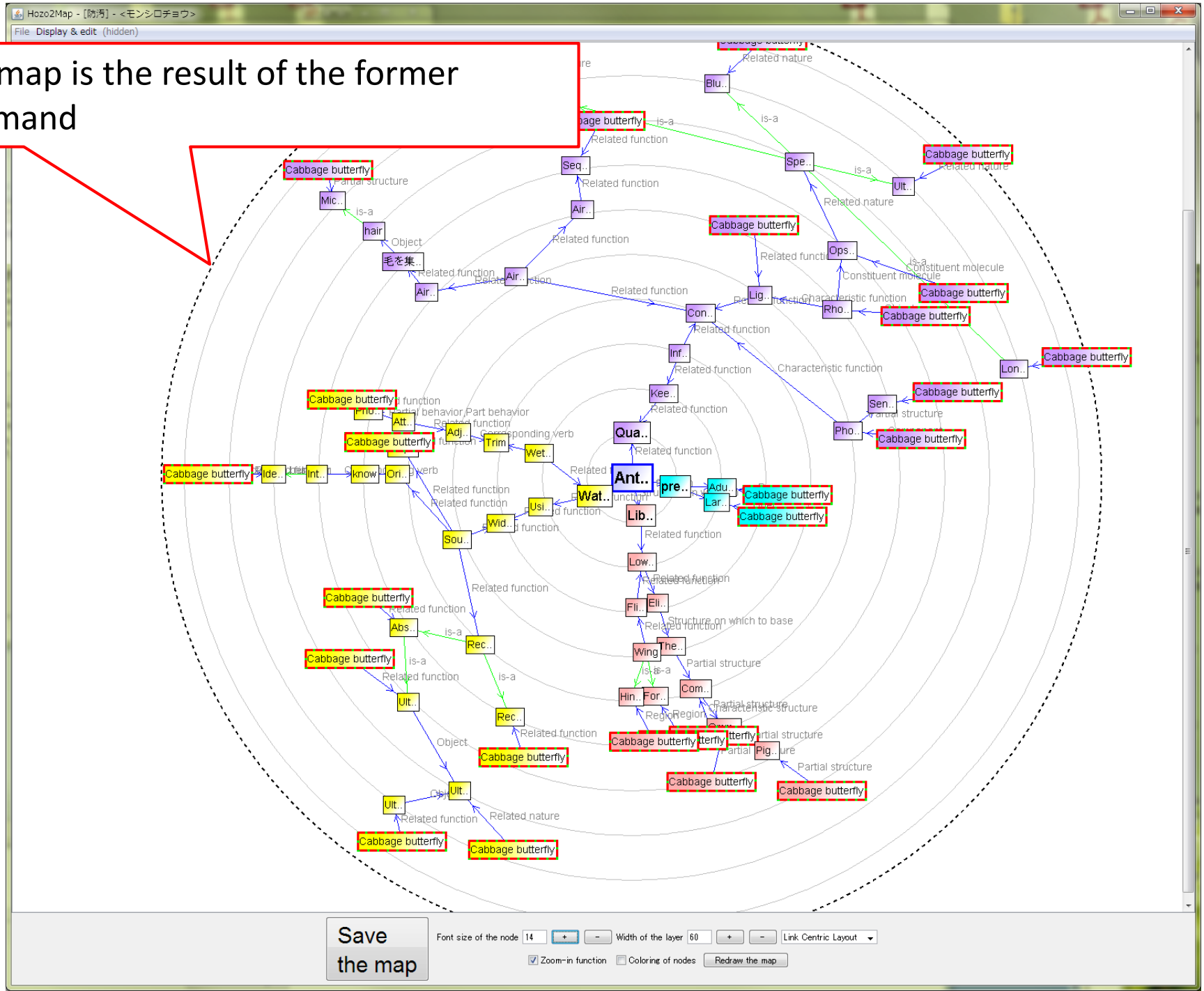
This is the map generated by the former command where all the paths passing through any node on the same layer other than “Hydrophilic” are closed. If you select “Sandfish” because you find it interesting, the path from the root “Antifouling” is highlighted.

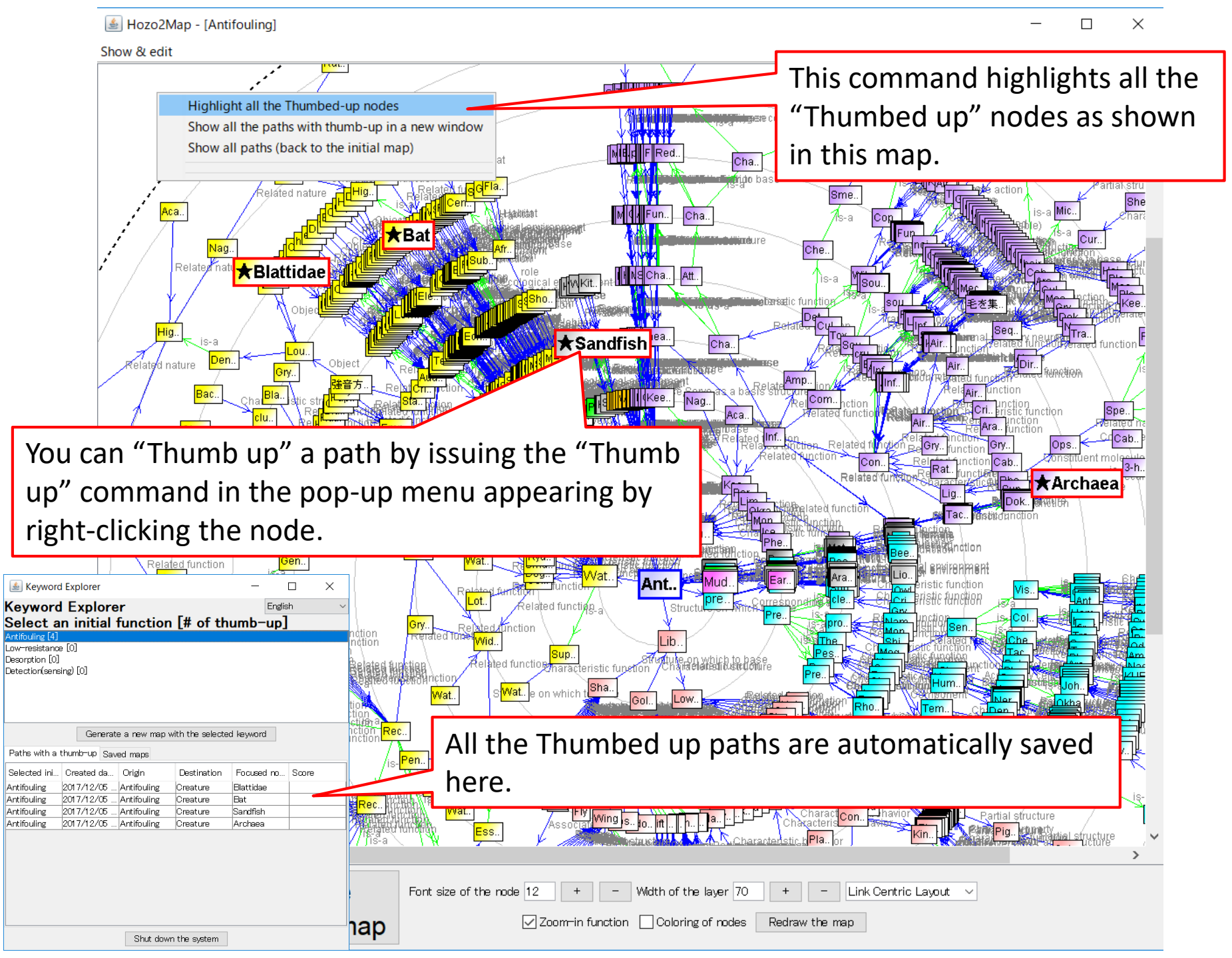
By clicking this “Show all the paths (back to the initial map) “ you can go back to the initial map.

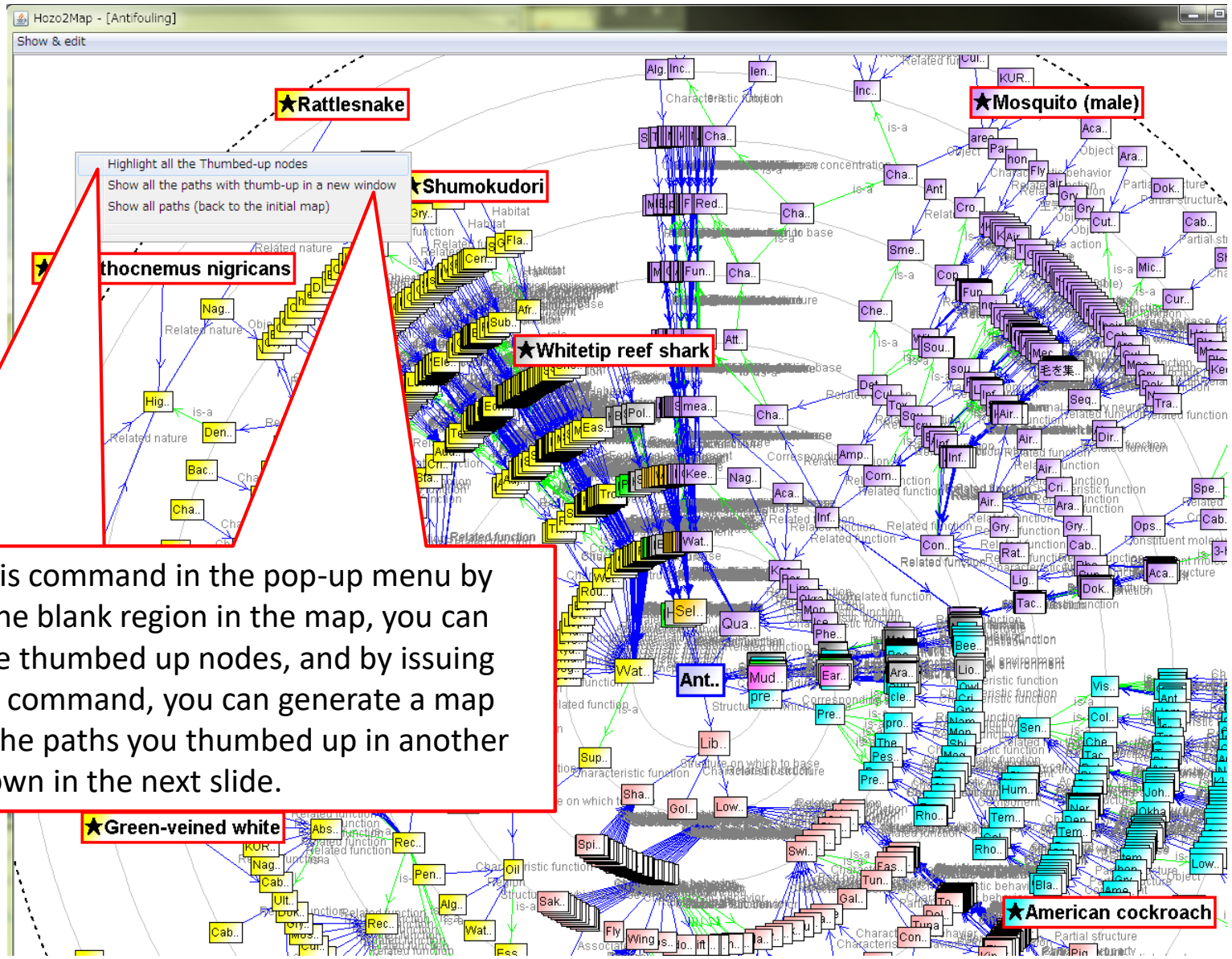
By clicking this button, you can save this map.




Search a keyword in the map <Antifouling>
cabbage
Search
Clear
Cabbage butterfly(25)
Skunk cabbage(1)
You can retrieve nodes in the present map by selecting “Search a keyword in the map” command from the pull down menu. Partial spellings rather than the full spelling are recommended. All the found nodes are highlighted.
By right-clicking one of the found nodes and selecting “Show all the paths to the selected nodes in a new window”, you will get the map in the next slide.
Cabbage butterfly
Save the map
Font size of the node
Width of the layer
Link Centric Layout
Zoom-in function
Coloring of nodes
Redraw the map

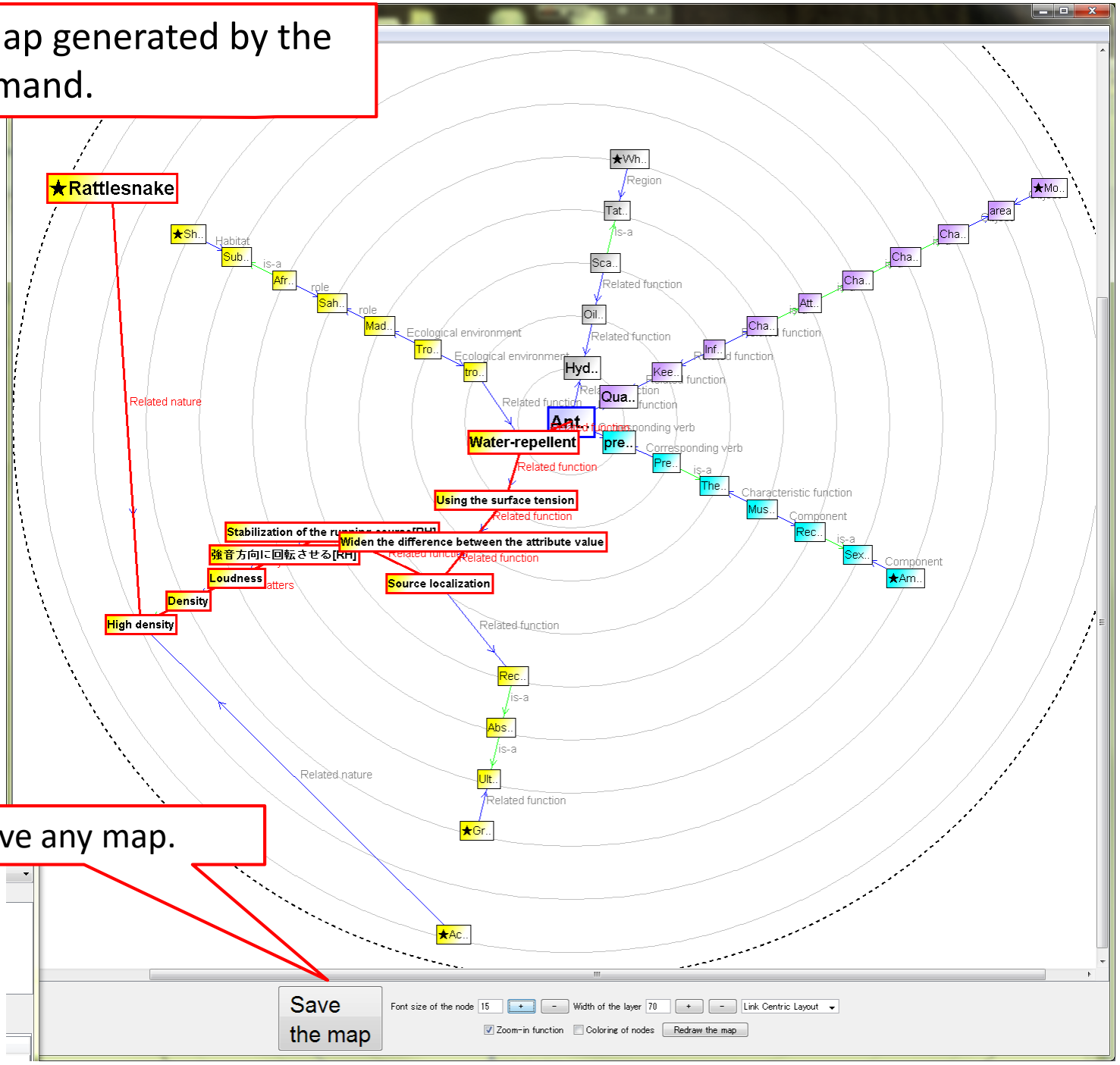

Hozo2Map - [防汚] - <モンシロチョウ>
File Display & edit (hidden)
This map is the result of the former command
Cabbage butterfly
Related nature
is-a
Related function
Partial structure
Object
Characteristic function
Constituent molecule
Structure on which to base
Corresponding verb
Part behavior
Ant..
Qua..
Lib..
Wat..
Con..
Lig..
Air..
Seq..
Spe..
Ops..
Rho..
Lon..
Sen..
Pho..
Inf..
Kee..
Low..
Fli..
Eli..
Wing
The..
Com..
Hin..
For..
Pig..
Rec..
Sou..
Abs..
Ult..
Mic..
hair
毛を集..
Att..
Adj..
Trim
Wet..
Ide..
Int..
know
Ori..
Usi..
Wid..
pre..
Adu..
Lar..
Save the map
Font size of the node
Width of the layer
Link Centric Layout
Zoom-in function
Coloring of nodes
Redraw the map


Hozo2Map - [Antifouling]
Show & edit
Highlight all the Thumbed-up nodes
Show all the paths with thumb-up in a new window
Show all paths (back to the initial map)
This command highlights all the "Thumbed up" nodes as shown in this map.
★Bat
★Blattidae
★Sandfish
★Archaea
Ant..
You can "Thumb up" a path by issuing the "Thumb up" command in the pop-up menu appearing by right-clicking the node.
Keyword Explorer
Keyword Explorer
Select an initial function [# of thumb-up]
English
Antifouling [4]
Low-resistance [0]
Desorption [0]
Detection(sensing) [0]
Generate a new map with the selected keyword
Paths with a thumb-up
Saved maps
Selected ini... Created da... Origin Destination Focused no... Score
Antifouling 2017/12/05 ... Antifouling Creature Blattidae
Antifouling 2017/12/05 ... Antifouling Creature Bat
Antifouling 2017/12/05 ... Antifouling Creature Sandfish
Antifouling 2017/12/05 ... Antifouling Creature Archaea
Shut down the system
All the Thumbed up paths are automatically saved here.
Font size of the node 12
Width of the layer 70
Link Centric Layout
Zoom-in function
Coloring of nodes
Redraw the map

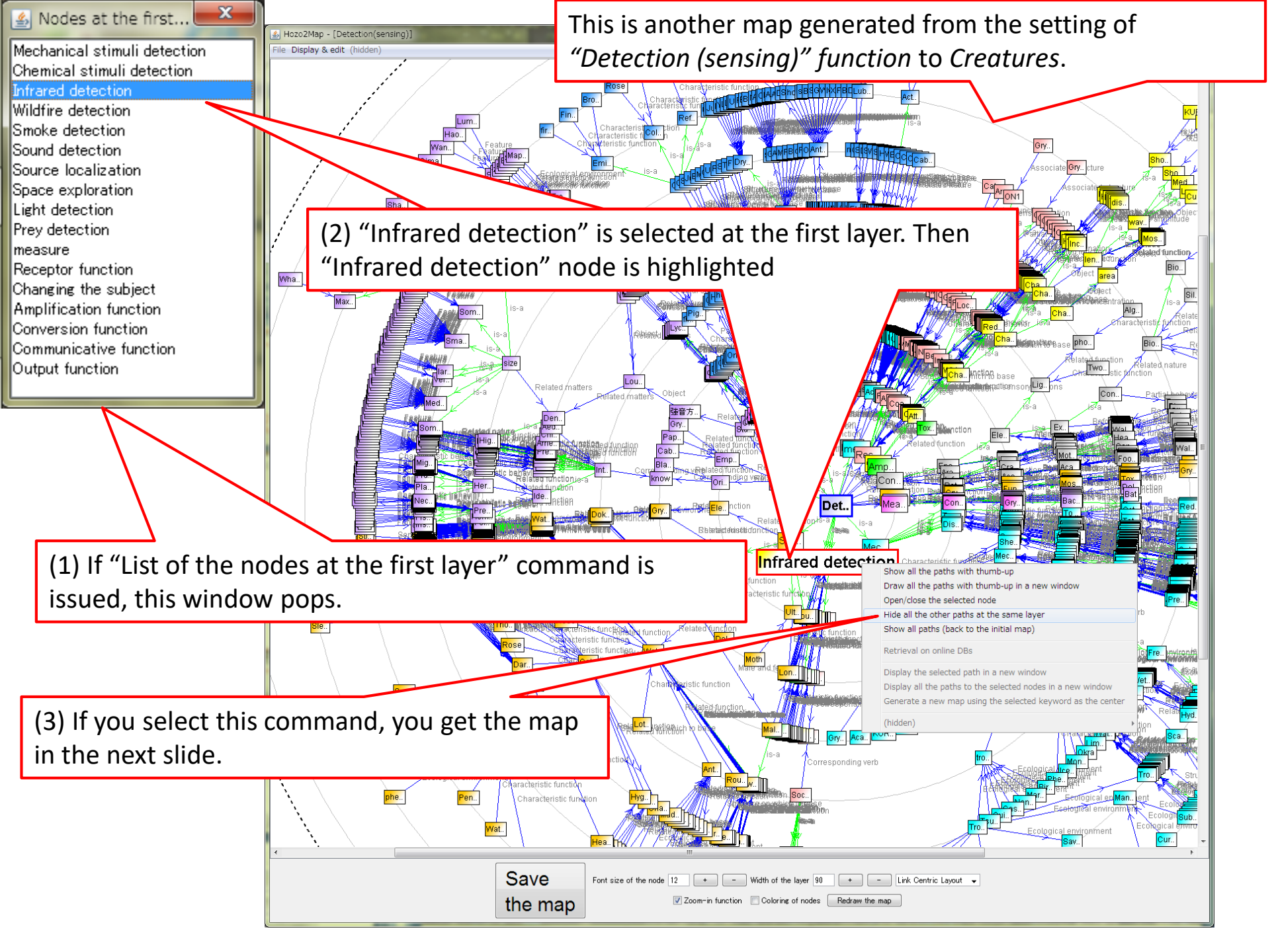


By selecting this command in the pop-up menu by right-clicking the blank region in the map, you can highlight all the thumbed up nodes, and by issuing the next lower command, you can generate a map showing only the paths you thumbed up in another window as shown in the next slide.

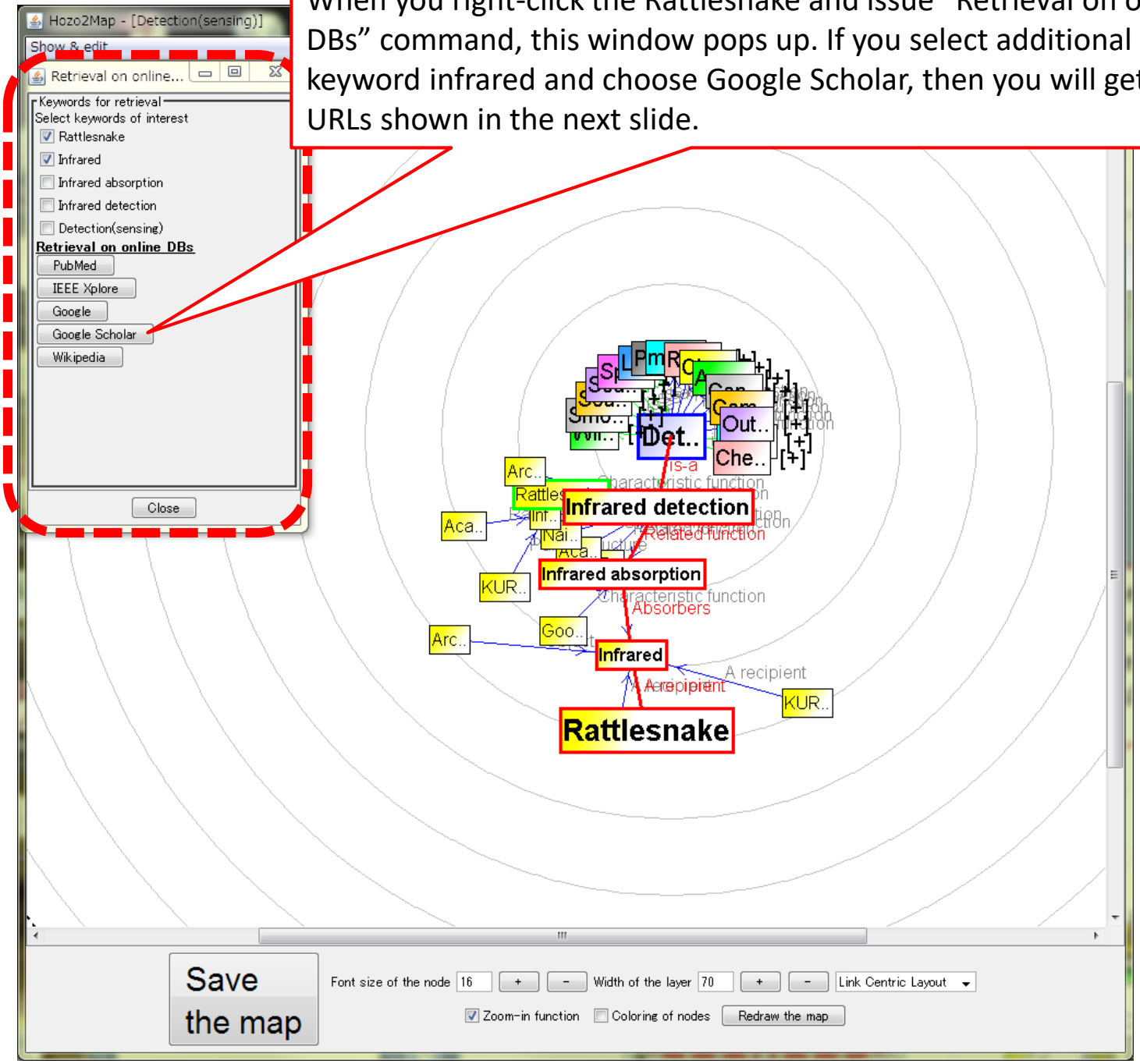
This is the map generated by the former command.



You can save any map.


Nodes at the first...
Mechanical stimuli detection
Chemical stimuli detection
Infrared detection
Wildfire detection
Smoke detection
Sound detection
Source localization
Space exploration
Light detection
Prey detection
measure
Receptor function
Changing the subject
Amplification function
Conversion function
Communicative function
Output function
Hozo2Map - [Detection(sensing)]
File Display & edit (hidden)
This is another map generated from the setting of "Detection (sensing)" function to Creatures.
(2) "Infrared detection" is selected at the first layer. Then "Infrared detection" node is highlighted
(1) If "List of the nodes at the first layer" command is issued, this window pops.
(3) If you select this command, you get the map in the next slide.
Det..
Infrared detection
Show all the paths with thumb-up
Draw all the paths with thumb-up in a new window
Open/close the selected node
Hide all the other paths at the same layer
Show all paths (back to the initial map)
Retrieval on online DBs
Display the selected path in a new window
Display all the paths to the selected nodes in a new window
Generate a new map using the selected keyword as the center
(hidden)
Save the map
Font size of the node
Width of the layer
Link Centric Layout
Zoom-in function
Coloring of nodes
Redraw the map

When you right-click the Rattlesnake and issue “Retrieval on online DBs” command, this window pops up. If you select additional keyword infrared and choose Google Scholar, then you will get the URLs shown in the next slide.



Rattlesnake Infrared

Scholar 約 3,090 件 (0.07 秒)

The **infrared**" vision" of snakes

EA Newman, PH Hartline - Scientific American, 1982 - JSTOR

... o· • 10· 20" 30· 40· 50· 60· OVERSHOOT SPATIAL ACCURACY of the **rattlesnake's infrared** system can be measured by presenting a warm object at various angles to the left or the right of a snake whose eyes are covered with blinders ...

☆ 99 引用元 152 関連記事 全 3 バージョン

[HTML] Integration of visual and **infrared** information in bimodal neurons of the **rattlesnake** optic tectum

[HTML] nih.gov

EA Newman, PH Hartline - Science (New York, NY), 1981 - ncbi.nlm.nih.gov

Abstract Bimodal neurons in the **rattlesnake** tectum, which receive sensory input from the retina and from the **infrared**-sensing pit organ, exhibit novel, highly nonlinear cross-modality interactions. Some units respond only to simultaneous bimodal stimulation. Others respond

☆ 99 引用元 162 関連記事 全 11 バージョン

Spatial and temporal integration in primary trigeminal nucleus of **rattlesnake infrared** system

LR Stanford, PH Hartline - Journal of neurophysiology, 1984 - Am Physiological Soc

The spatial and temporal characteristics of the **infrared** responses of single neurons in the nucleus of the lateral descending trigeminal tract (LTTD) of the **rattlesnake** were investigated. The LTTD is the sole projection site of trigeminal neurons that innervate the

☆ 99 引用元 7 関連記事 全 3 バージョン

Ground squirrels use an **infrared** signal to deter **rattlesnake** predation

[HTML] pnas.org

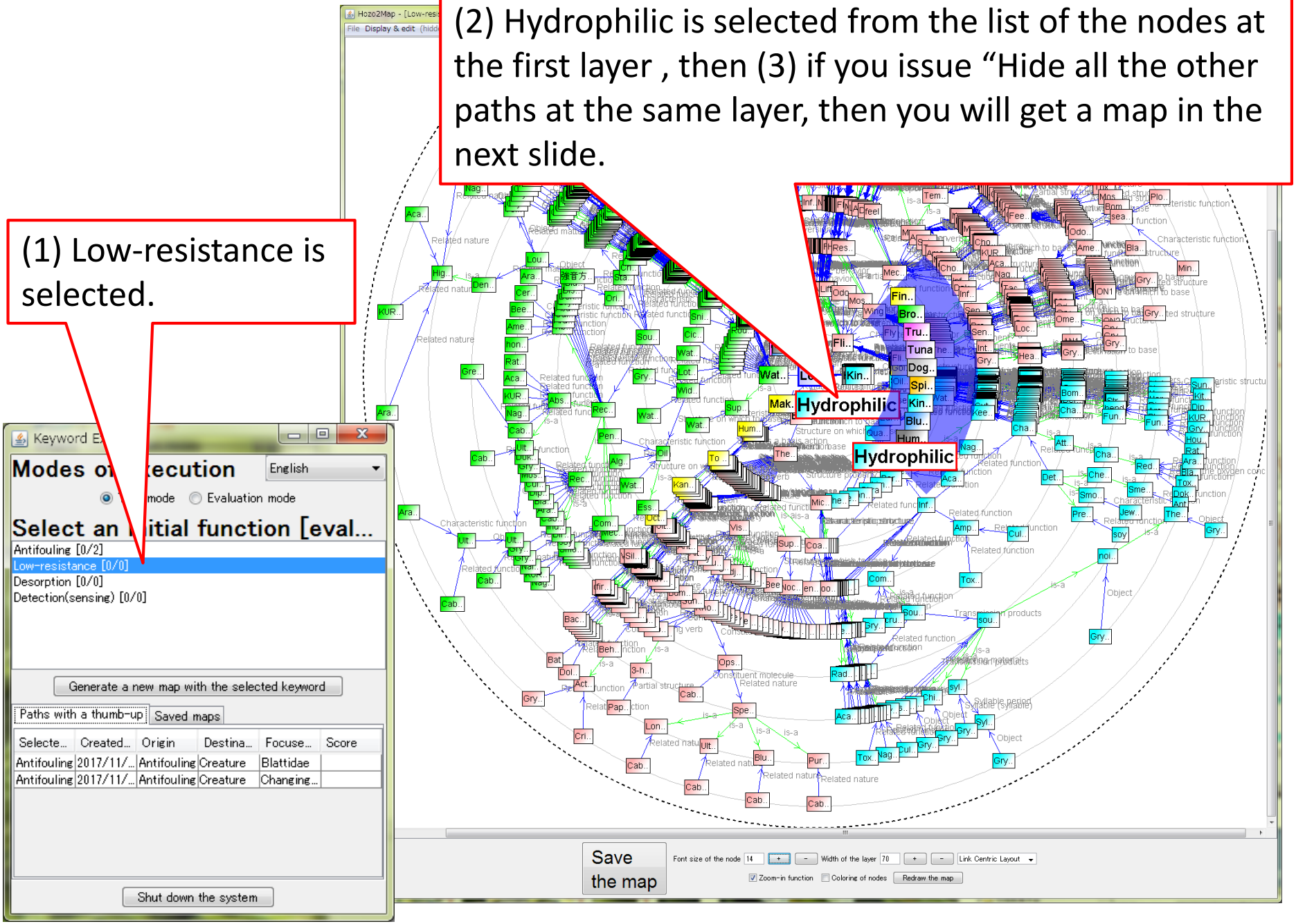
AS Rundus, DH Owings, SS Joshi... - Proceedings of the ..., 2007 - National Acad Sciences

Abstract The evolution of communicative signals involves a major hurdle; signals need to effectively stimulate the sensory systems of their targets. Therefore, sensory specializations of target animals are important sources of selection on signal structure. Here we report the

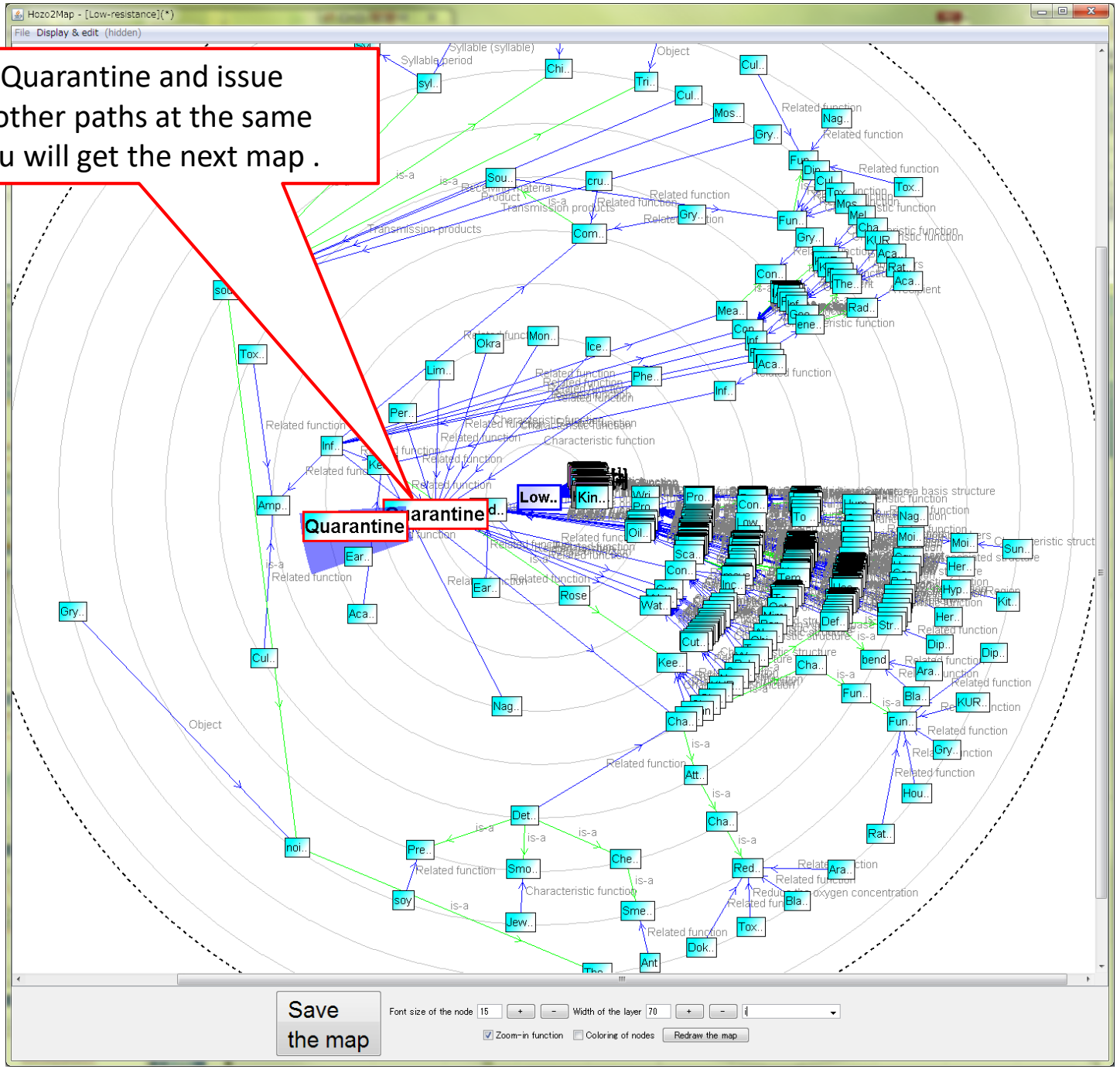
☆ 99 引用元 103 関連記事 全 16 バージョン

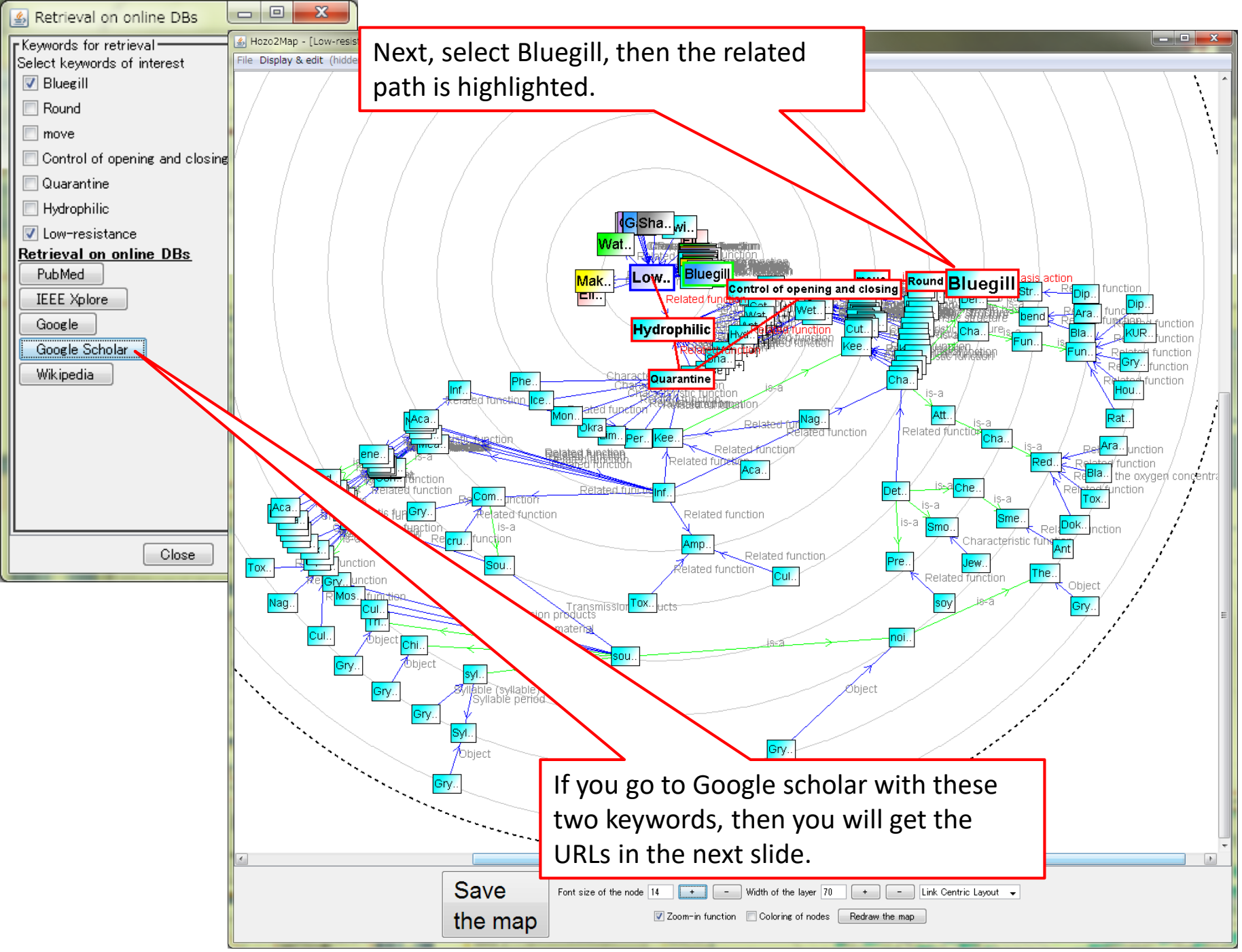
(2) Hydrophilic is selected from the list of the nodes at the first layer , then (3) if you issue “Hide all the other paths at the same layer, then you will get a map in the next slide.

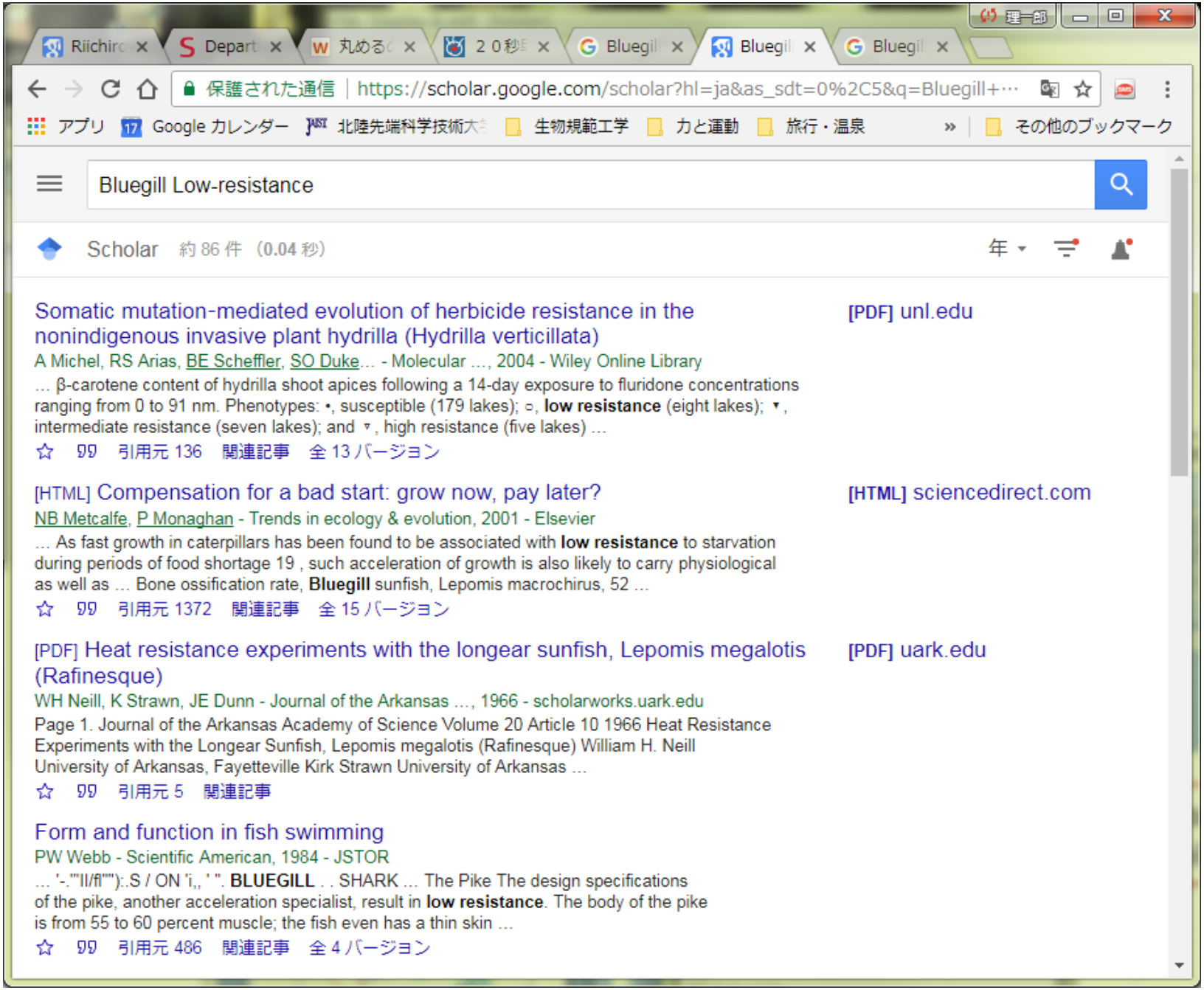
(1) Low-resistance is selected.



Next, choose Quarantine and issue “Hide all the other paths at the same layer, then you will get the next map .




Retrieval on online DBs
Keywords for retrieval
Select keywords of interest
Bluegill
Round
move
Control of opening and closing
Quarantine
Hydrophilic
Low-resistance
Retrieval on online DBs
PubMed
IEEE Xplore
Google
Google Scholar
Wikipedia
Close
Hozo2Map - [Low-resis
File Display & edit (hidde
Next, select Bluegill, then the related path is highlighted.
Bluegill
Control of opening and closing
Hydrophilic
Quarantine
Low..
Round
Related function
is-a
If you go to Google scholar with these two keywords, then you will get the URLs in the next slide.
Save the map
Font size of the node
Width of the layer
Link Centric Layout
Zoom-in function
Coloring of nodes
Redraw the map


Bluegill Low-resistance
Scholar 約 86 件 (0.04 秒)
Somatic mutation-mediated evolution of herbicide resistance in the nonindigenous invasive plant hydrilla (Hydrilla verticillata)
[PDF] unl.edu
A Michel, RS Arias, BE Scheffler, SO Duke... - Molecular ..., 2004 - Wiley Online Library
... β-carotene content of hydrilla shoot apices following a 14-day exposure to fluridone concentrations ranging from 0 to 91 nm. Phenotypes: •, susceptible (179 lakes); ○, low resistance (eight lakes); ▾, intermediate resistance (seven lakes); and ▿, high resistance (five lakes) ...
☆ 99 引用元 136 関連記事 全 13 バージョン
[HTML] Compensation for a bad start: grow now, pay later?
[HTML] sciencedirect.com
NB Metcalfe, P Monaghan - Trends in ecology & evolution, 2001 - Elsevier
... As fast growth in caterpillars has been found to be associated with low resistance to starvation during periods of food shortage 19 , such acceleration of growth is also likely to carry physiological as well as ... Bone ossification rate, Bluegill sunfish, Lepomis macrochirus, 52 ...
☆ 99 引用元 1372 関連記事 全 15 バージョン
[PDF] Heat resistance experiments with the longear sunfish, Lepomis megalotis (Rafinesque)
[PDF] uark.edu
WH Neill, K Strawn, JE Dunn - Journal of the Arkansas ..., 1966 - scholarworks.uark.edu
Page 1. Journal of the Arkansas Academy of Science Volume 20 Article 10 1966 Heat Resistance Experiments with the Longear Sunfish, Lepomis megalotis (Rafinesque) William H. Neill University of Arkansas, Fayetteville Kirk Strawn University of Arkansas ...
☆ 99 引用元 5 関連記事
Form and function in fish swimming
PW Webb - Scientific American, 1984 - JSTOR
... '-.'"II/fl""):.S / ON 'i,, ' ". BLUEGILL . . SHARK ... The Pike The design specifications of the pike, another acceleration specialist, result in low resistance. The body of the pike is from 55 to 60 percent muscle; the fish even has a thin skin ...
☆ 99 引用元 486 関連記事 全 4 バージョン