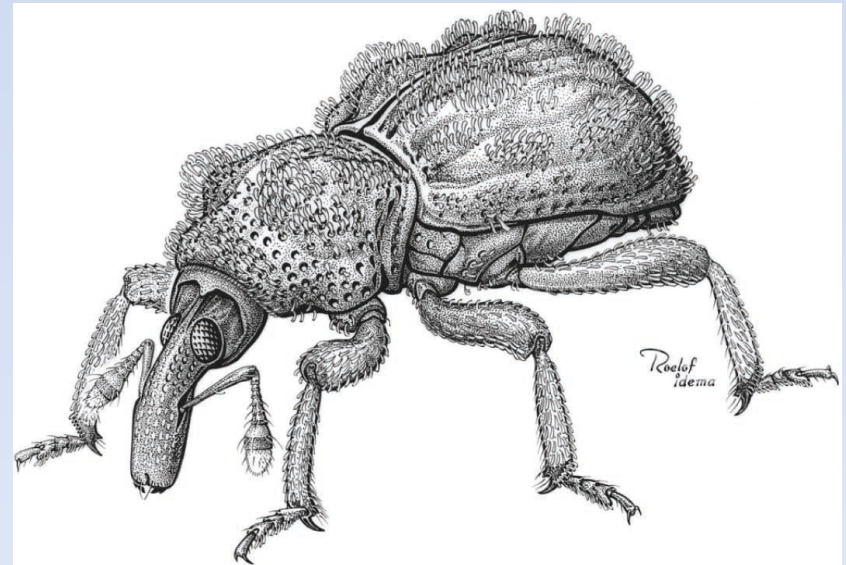


Sampling Leaf Litter Arthropods

Robert Anderson
Canadian Museum of Nature
Musée canadien de la nature



canadian museum of nature
nature
musée canadien de la nature

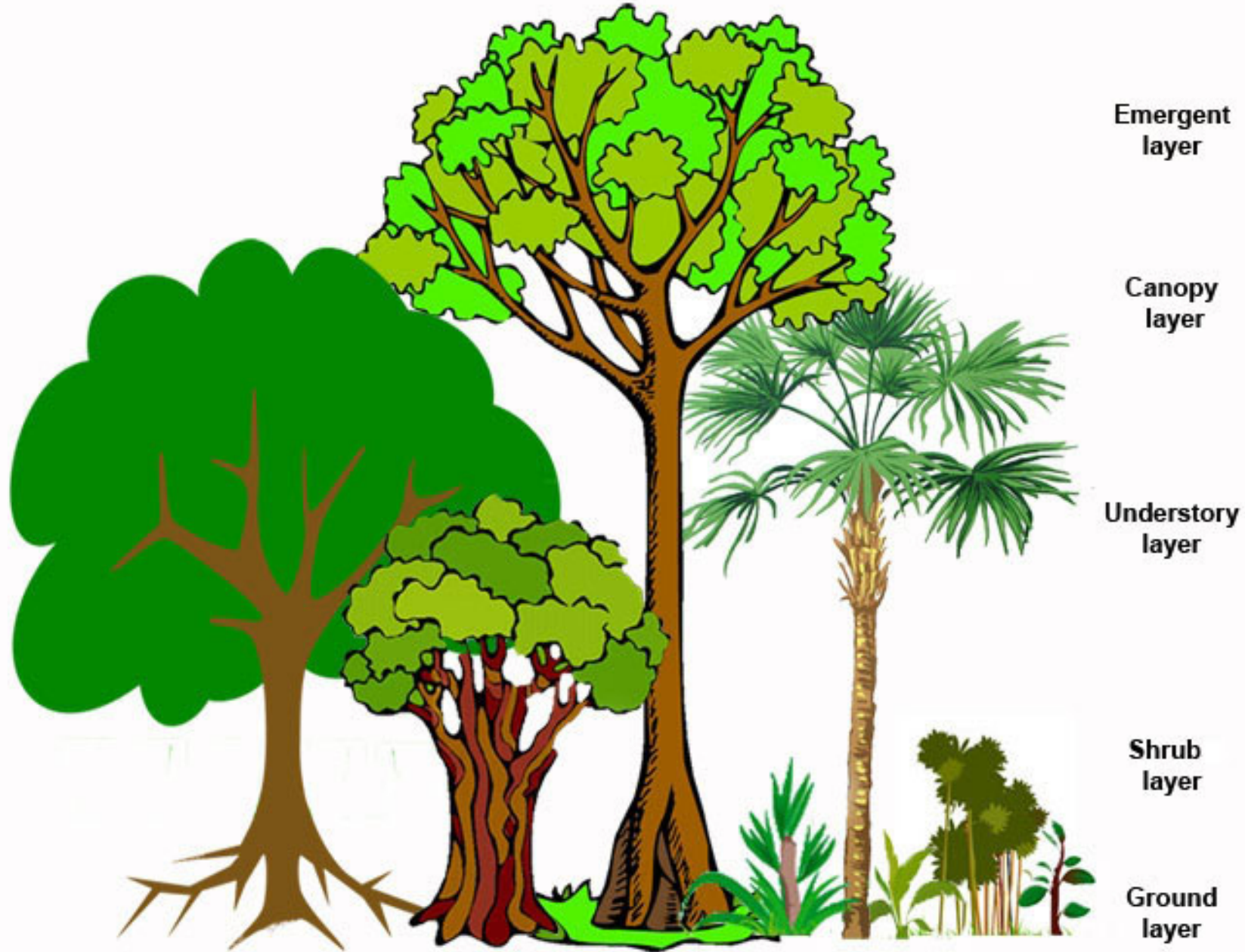












Tropical Forest Stratification

Drawing by Manisha Sashital



LLAMA







B-08-1
Witten T-1
Weevils

B-08-2
Witten T-2
Weevils

B-08-1
Witten T-1
Weevils

B-08-2
Witten T-2
Weevils

B-08-3
Witten T-3
Weevils

B-09-1
Witten T-1
Weevils

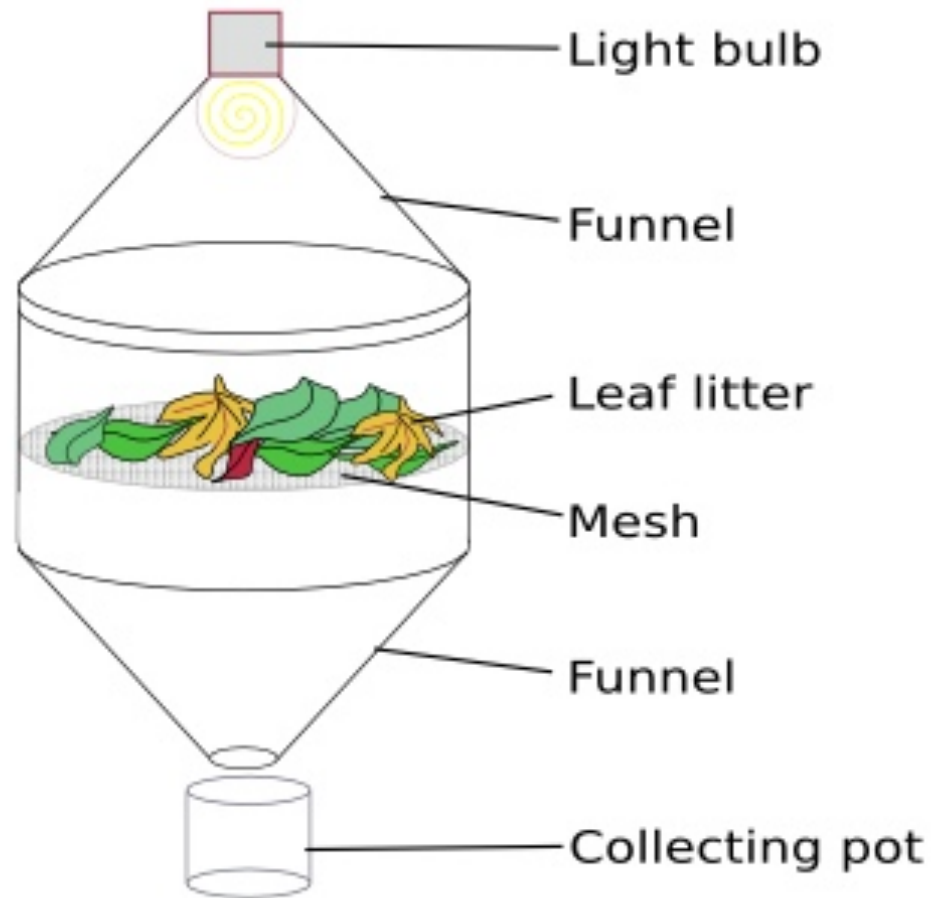
B-09-2
Witten T-2
Weevils

K-09-02

SEARCH
SERIAL
NUMBER









THE PAN-ARCTIC VIEW

The Arctic Ring of Life



The Arctic itself was once among the most hospitable in the world. Much of this area is now covered by a permanent ice cap, a result of the combination of the world's low albedo, low, and persistent high-latitude winds. Because highly specialized and unique species of fish, mammals, and birds have adapted to this environment - and in some regions, indigenous people like the Inuit also take advantage of this, being well-adapted to the region - the area has been called the "Arctic Ring of Life". It is important that the Arctic be protected as a unique natural resource, which is governmentally managed for future generations.





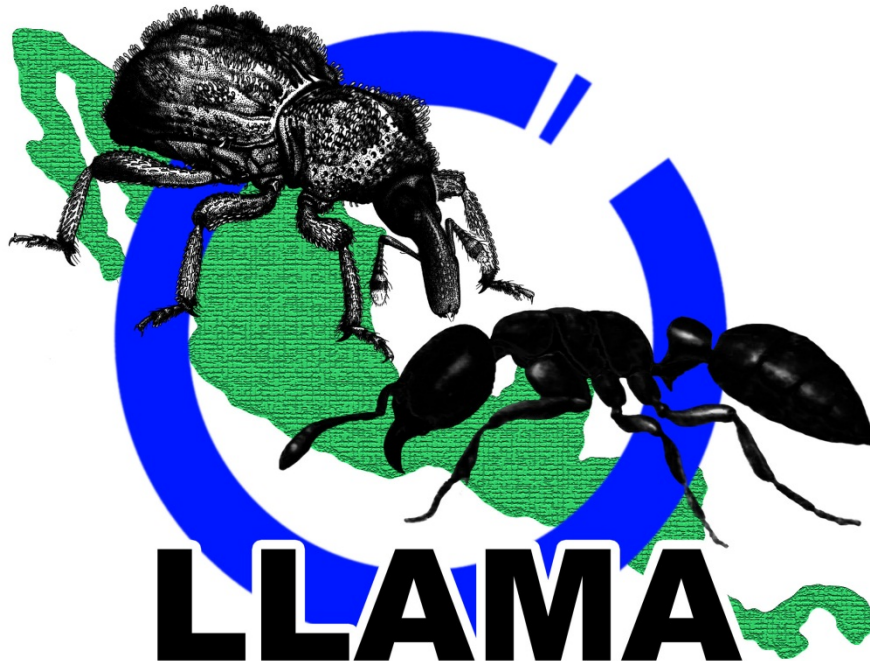
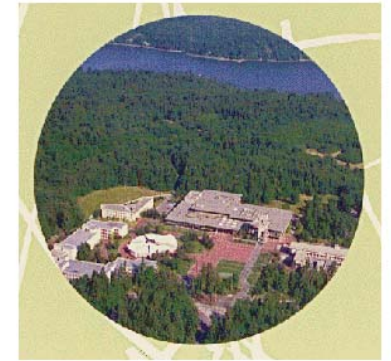




LLAMA

- Leaf Litter Arthropods
- of MesoAmerica

EVERGREEN
THE EVERGREEN STATE COLLEGE
OLYMPIA, WASHINGTON



nature.ca
Canadian Museum of Nature



National Science Foundation
WHERE DISCOVERIES BEGIN

<http://llama.evergreen.edu/>



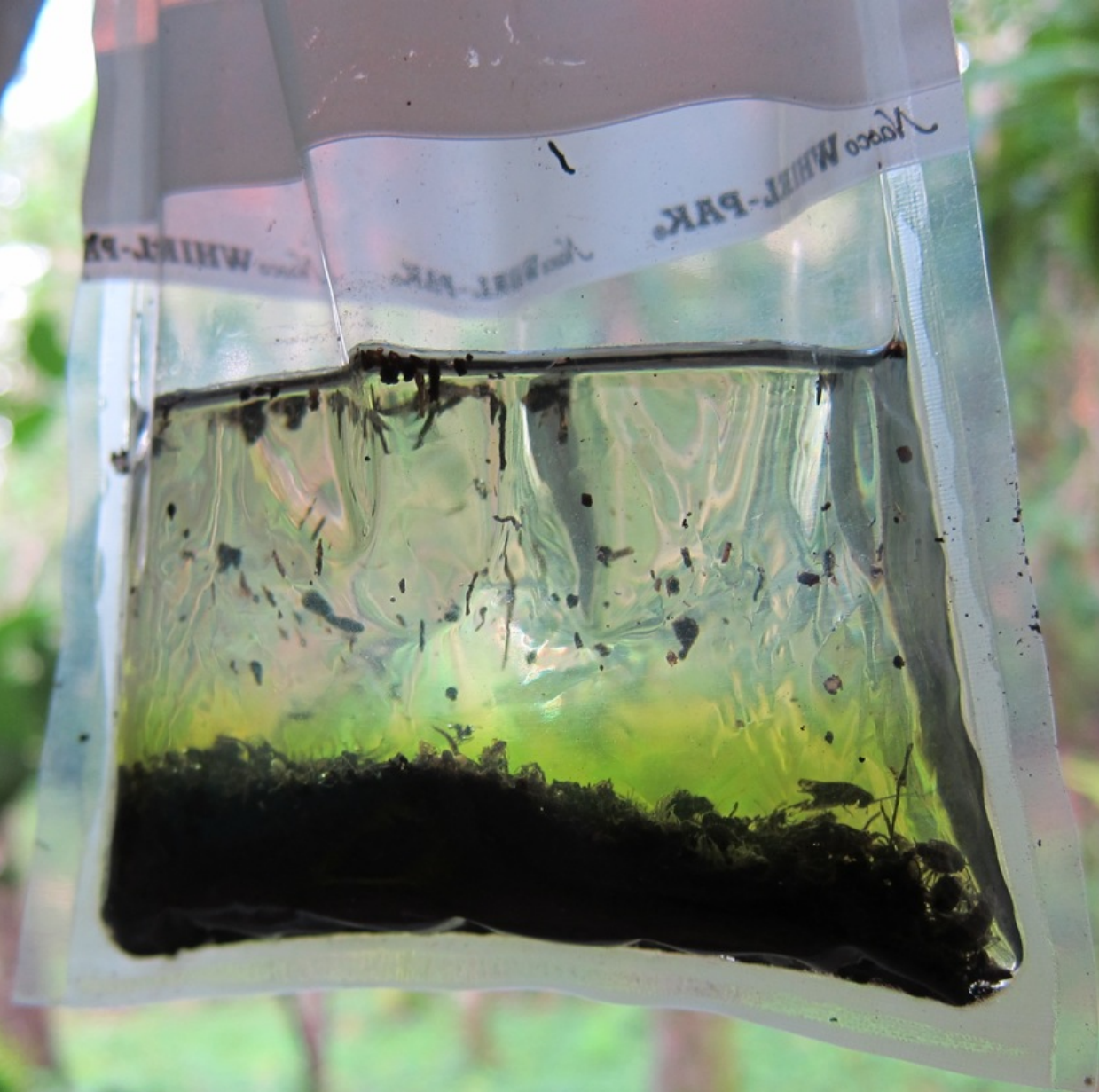














Berlese Funnel

Pros

- Fast

- Clean, little debris

Cons

- Need electricity

- Bulky, not easily portable

- Possible light attraction contamination

- Labour intensive

Winkler Funnel

Pros

- Portable, easily packable
- No contamination
- Easy, fast setup – no maintenance
- Huge numbers of samples possible

Cons

- Samples can be dirty
- Requires 3 days optimal extraction
- Suitable hanging venue







Sifter & sifting

Habitat selection

Habitat variation

Sampling effort

Sample transport

Weather



Winkler Sifter



Sifting









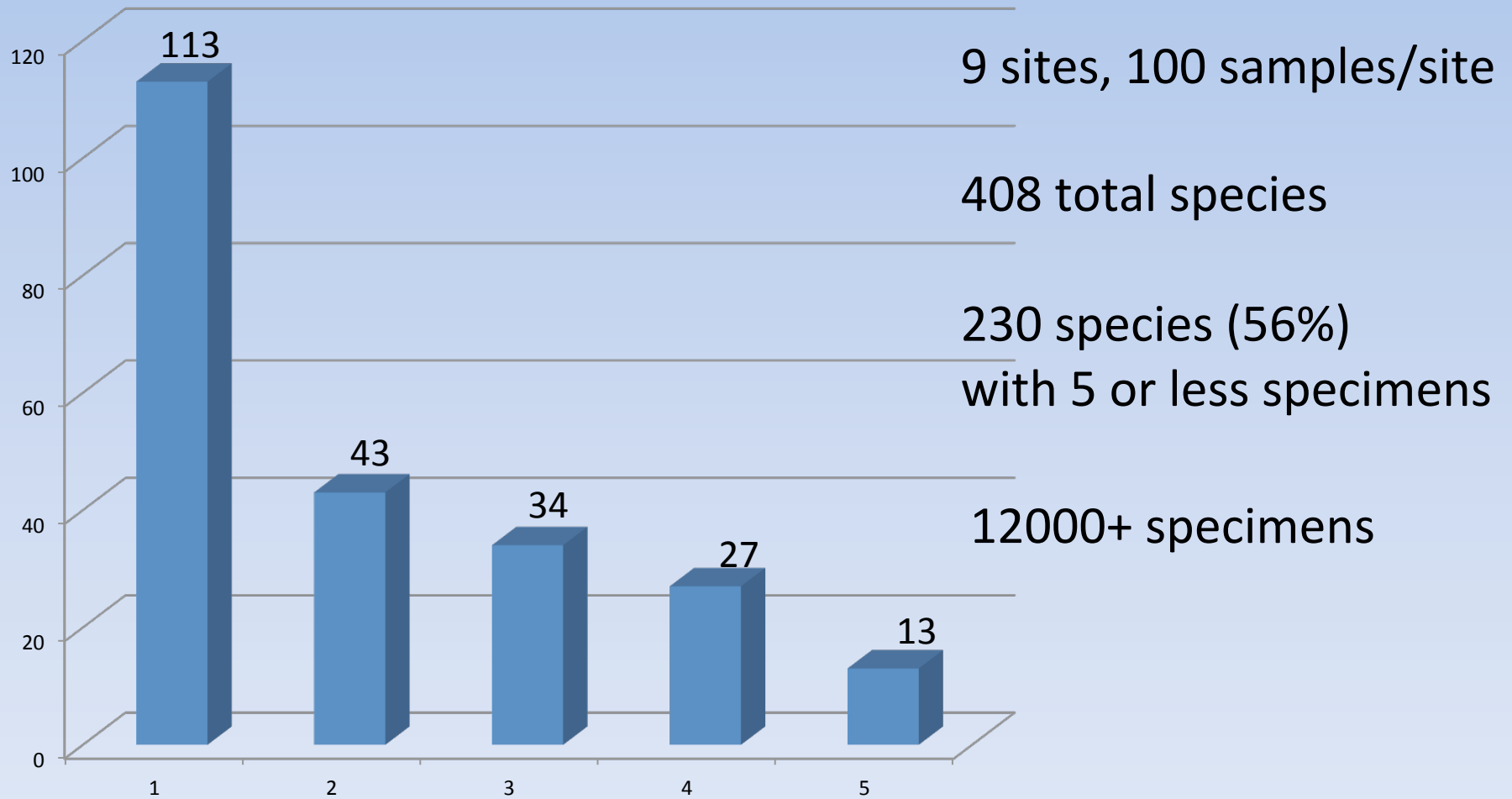








Mexico; Chiapas, 2008 (WEEVILS)



specimens of species collected

9 sites, 100 samples/site

408 total species

230 species (56%)
with 5 or less specimens

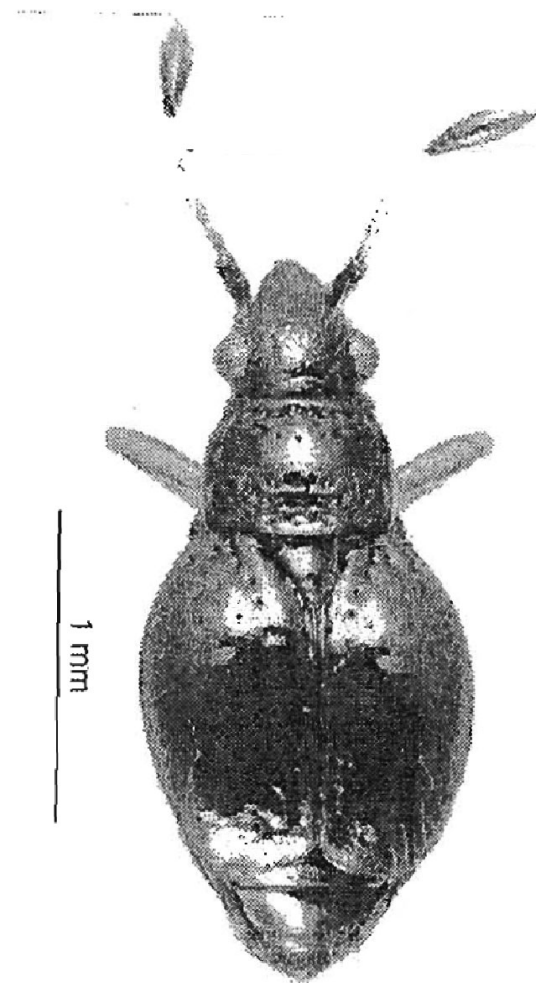
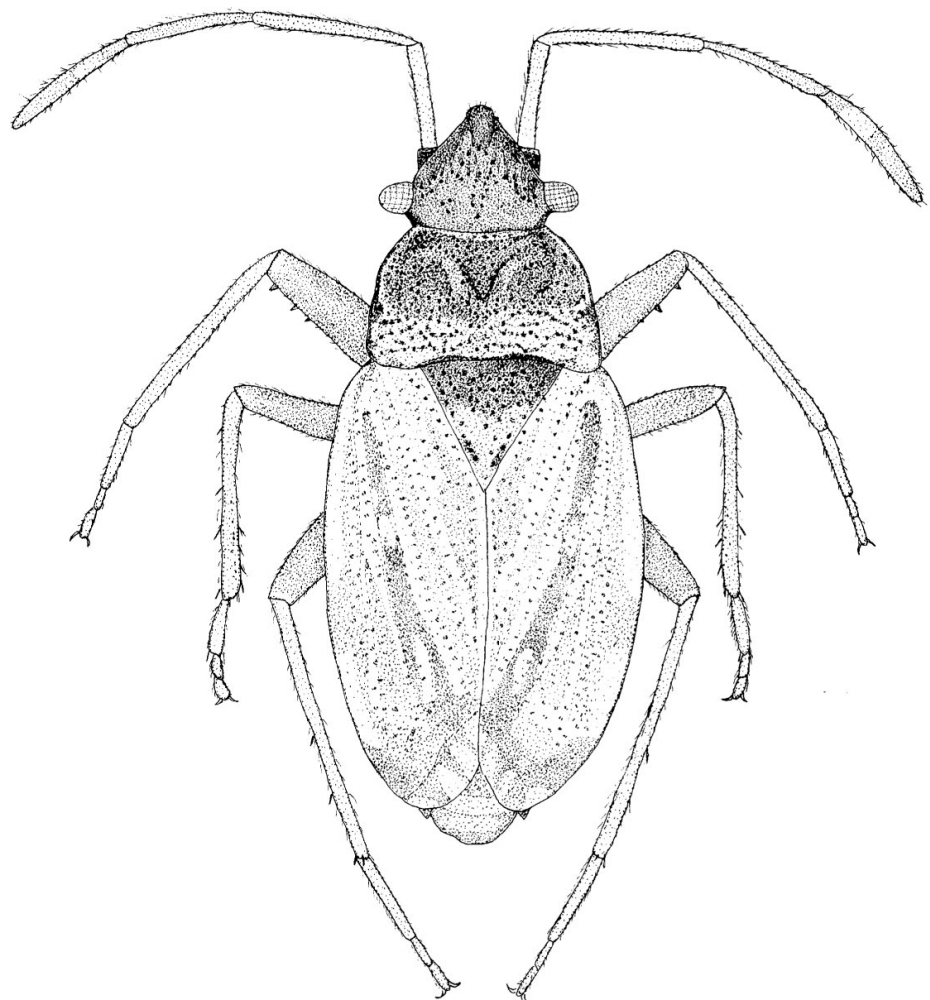
12000+ specimens

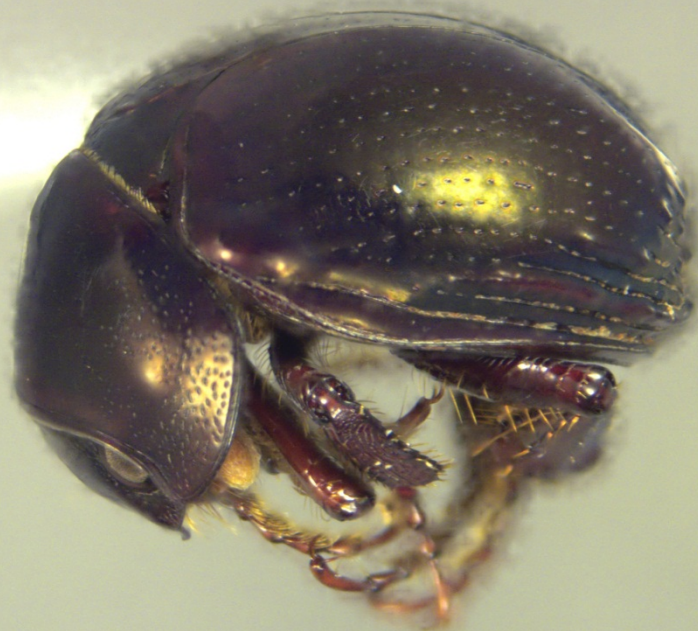




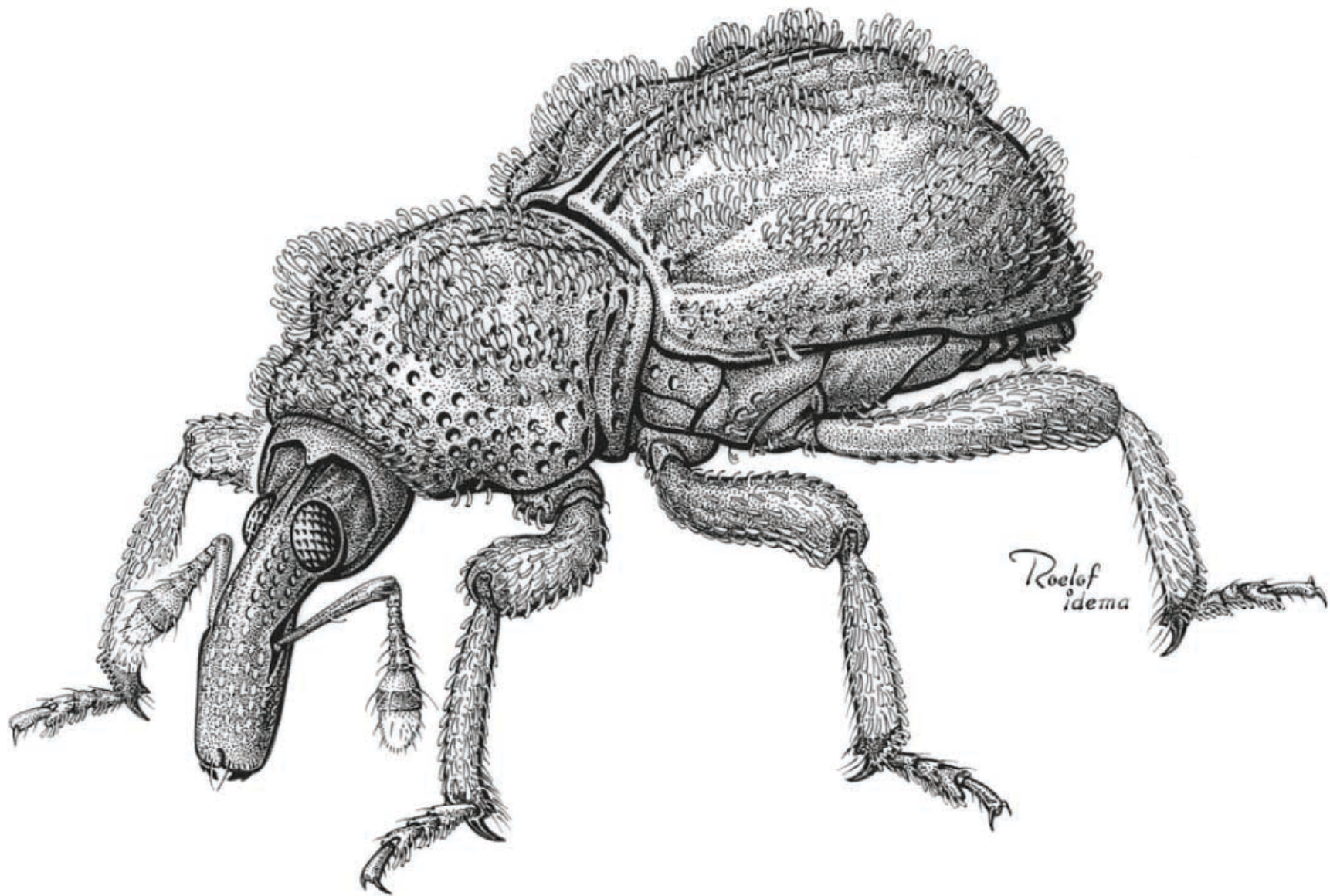


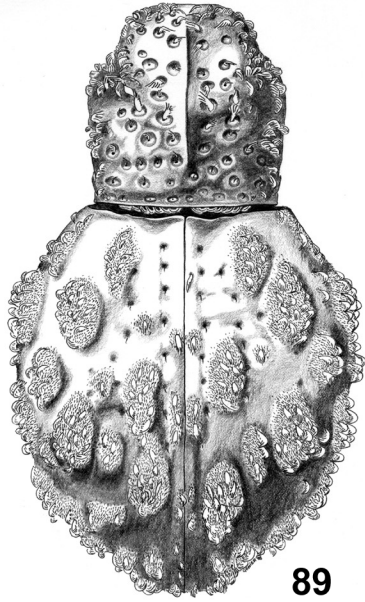




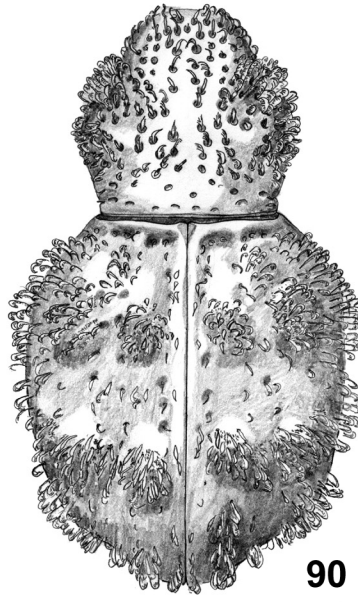








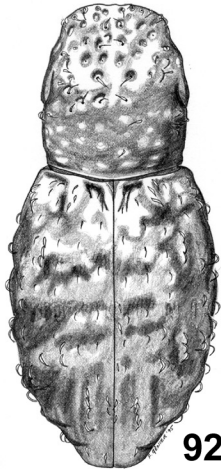
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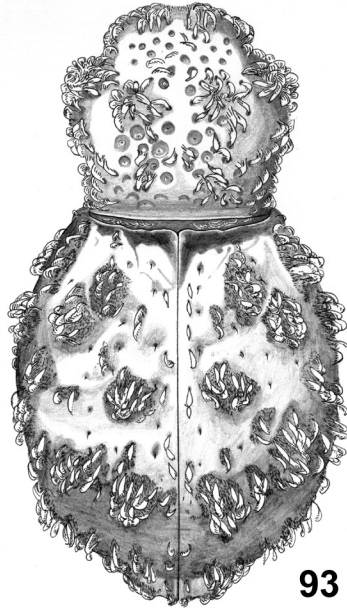
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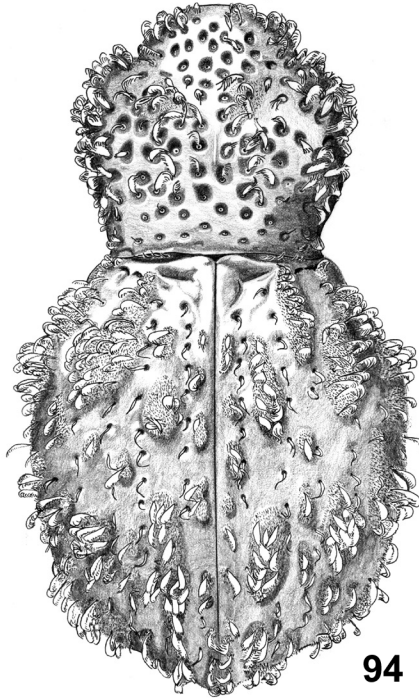
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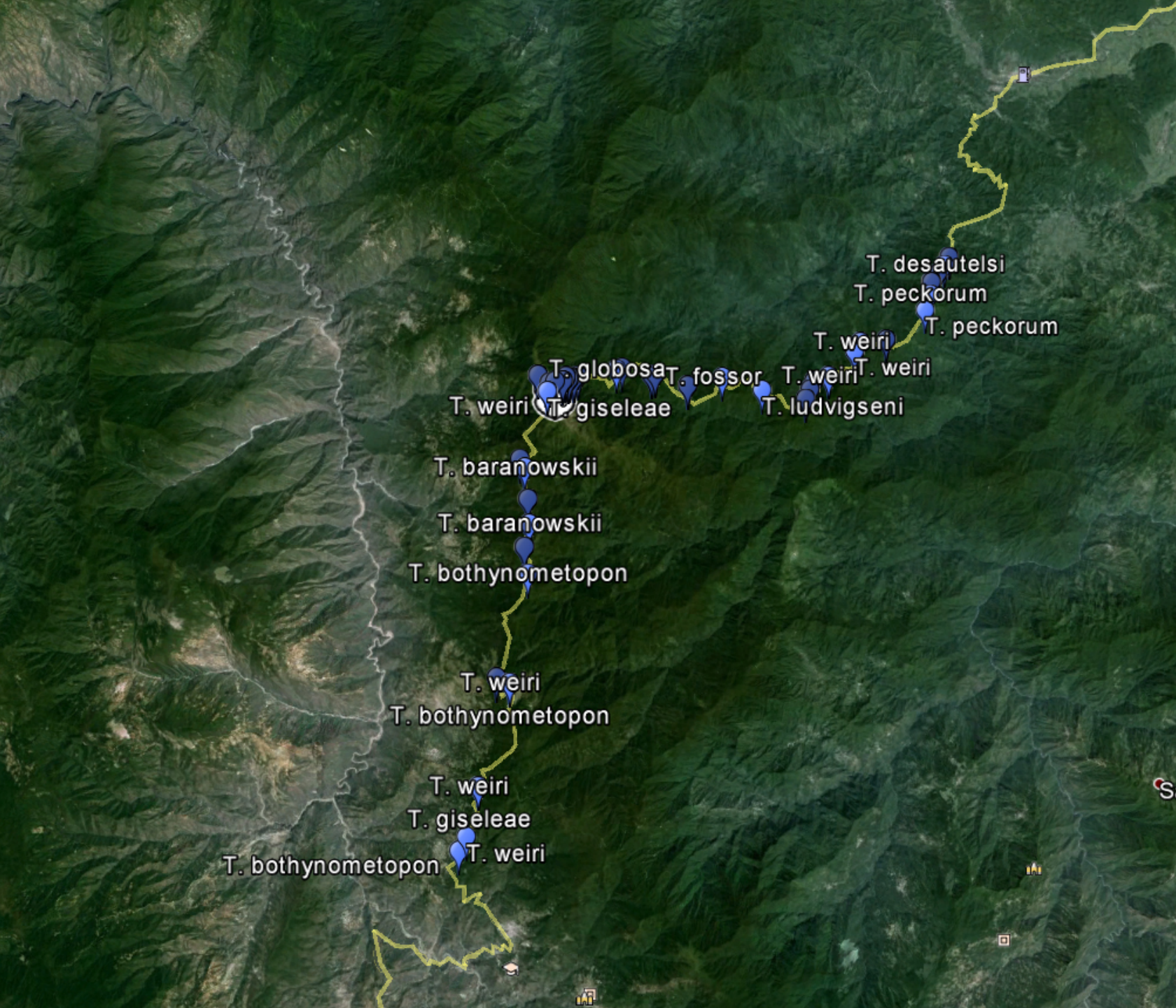
92



93



94



45

Kms

17

spp