## Heleopera

This genus includes some beautiful and interesting species.

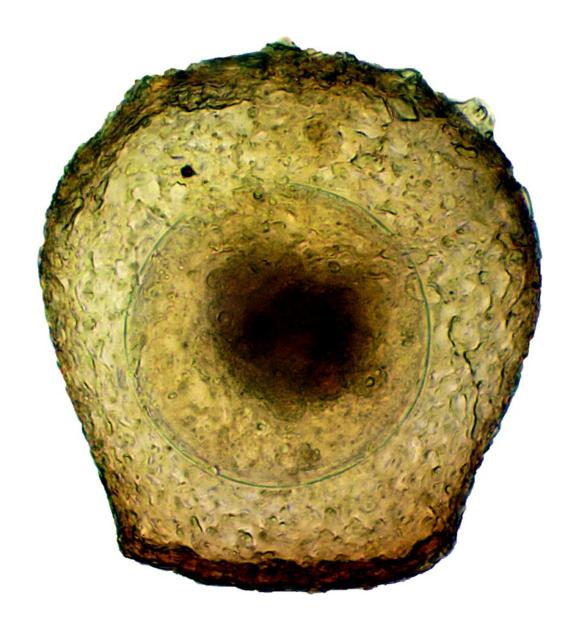
The name comes from Greek: helos = a bog, pera = a bag.

The image on the right of an old empty money purse may give you an idea of the general shape: flat, rounded fundus and slit-shaped

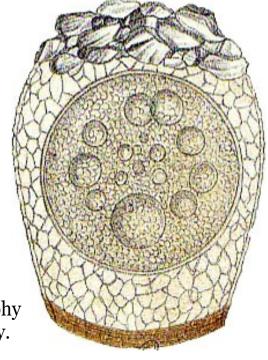




Heleopera petricola, about 135 μm high.



Shell composed of siliceous plates of irregular shape. Fundus more or less loaded with large quartz sand. You find *Heleopera* mostly in an encysted condition.



To the right: chromo-lithography of *H. petricola* by Joseph Leidy.

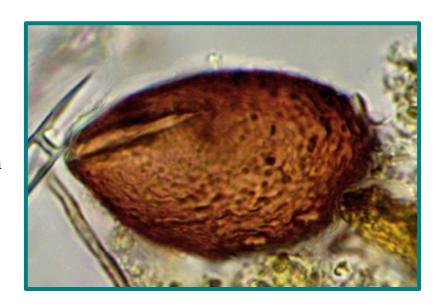


## Heleopera rosea

is probably a variety of *H. petricola*.

Note the typical yellow lip.

The mouth



## Heleopera sphagni

As the name implies a sphagnobiont. The ovular test is mostly covered with transparent diatom shells, its plasma always containing symbiotic algae.

In encysted condition (below) the mouth is blocked with an operculum.



Joseph Leidy:

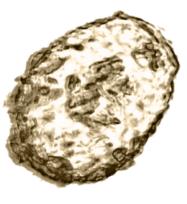
"I often found this species in association with *H. petricola*, which however is rarer.

...

It has the same bright coloring as *Hyalosphenia papilio*, but has appeared to me of less graceful proportions and beauty."

A small and inconspicuous species is *Heleopera sylvatica*,

about 70  $\mu m$ , here compared with a 100  $\mu m$  large *Heleopera rosea*:







Heleopera rosea mother and daughter before final separation. Both plasma bodies are visible.

The yellow lip of the mother cell (left) is faintly visible, the transparent daughter shell will turn reddish with age.

## Further reading:

- Ferry Siemensmas Heleopera-pages.
- The Joseph Leidy Portal.
- My Heleopera-page.

All comments to the Autor Hans Rothauscher are welcome.

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