

***Uromyces behenis* – another *Silene* rust.** Debbie Evans

The 2 rust species infecting mainly Red Champion, *Silene dioica* being presently monitored by Gill Brand are *Puccinia arenariae* and *Puccinia behenis*. These 2 rusts are very common on this host in my area of NW Wales, (Caernarfonshire, VC49 and Anglesey, VC52). I did not appreciate just how much *Silene dioica* we had here in our hedgerows etc in comparison to other areas until it was commented on by Tom Preece. He says there is little in Shropshire, (pers. comm. Gill). This might explain the large number of records of both rust species I have amassed locally. Both species appear to be equally common as I have found in previous years.

In addition to these 2 species I also find a 3<sup>rd</sup> rust, *Uromyces behenis*. This rust infects Sea Campion, *Silene uniflora* (was *S. maritima*). Ellis and Ellis gives Bladder Campion, *Silene vulgaris* as another host of *U. behenis* and both *Silene* species are said to support *Puccinia behenis* infection but I have not seen any of these combinations.

For keen “rusters” Gill has asked me to write a few lines about *U. behenis*.



Aecial cups of *Uromyces behenis* on a *Silene uniflora* leaf

***Uromyces behenis* - Description**

*Silene uniflora* is a coastal plant growing on cliffs, rocks and shingle, so the rust also has a mainly coastal distribution and most of my records have been fairly close to the sea. Occasional records have been made slightly inland on mountainsides where the plant grows.

The rust is easily differentiated from the 2 other species. The presence of infection is looked for by examining plants for pale yellow or purple spots (sometimes purple fringing on spots), on the upper side of the leaves. On the underside pretty yellow aecial cups can be found on these coloured spots. (Occasional cups may occur on the upper leaf and stem). Plants may show relatively little infection and require close inspection but sometimes the infection is quite heavy and more obvious, although rarely causing too much permanent harm to the plant. I have recorded this aecial stage in most months of the year. Occasionally the telia will also be found. These are present on the leaves, often surrounding the cups and additionally on the stems. The telia are dark brown to black and slightly shiny. (Uredinia not found).



Telia on stem



Infected leaves with aecial cups of *Uromyces behenis*



Microscopic details of the aeciospores (Stage I), and teliospores (Stage III) can be found in E & E and Wilson and Henderson but the rust can be readily identified with confidence by the presence of the aecial cups, not found in either of the other 2 species.

This rust is another under-recorded species and should be looked for wherever the host plant grows. I have easily found and recorded it along the coast of Wales

**References:**

Microfungi on Land Plants - An Identification Handbook, Ellis and Ellis, Richmond Publishing 1997  
British Rust Fungi, Wilson and Henderson, Cambridge University Press 1966.



Scanned *Silene uniflora* heavily infected with *Uromyces behenis* I, III