Urocystis floccosa in Britain

BY

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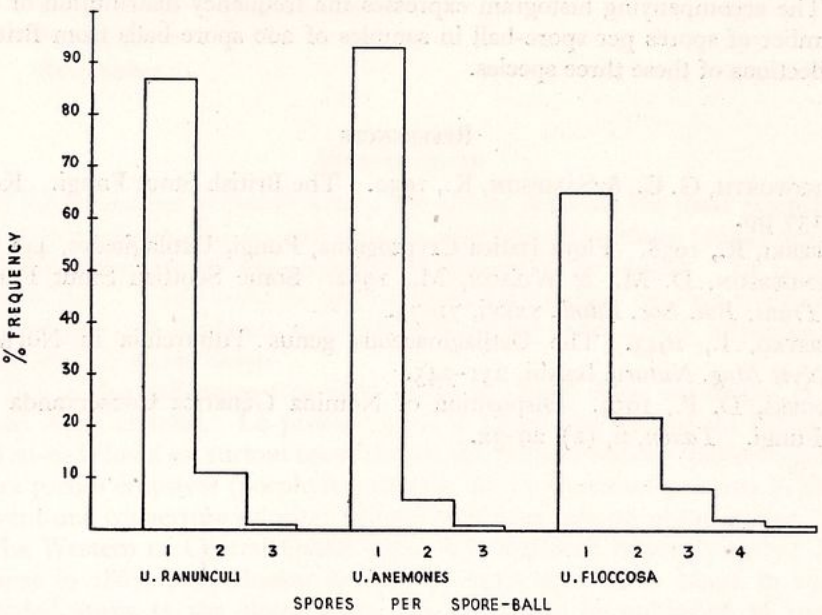
In a previous note (Henderson & Wilson, 1952, p. 73) it was pointed out that the fungus on *Trollius* and *Ranunculus ficaria* was readily distinguishable from *Urocystis anemones* on *Anemone nemorosa* and should be known as *Tuburcinia ficariae* (Unger) Liro. Since that paper was prepared the proposal to conserve *Urocystis* Rabenh. ex Fuckel against *Tuburcinia* Fr. has been adopted by the special committee for fungal nomenclature (Rogers, 1953) although not yet approved by a full International Botanical Congress.



Percentage frequency distribution of 1-, 2-, 3-, 4- and 5-spored spore-balls of *Urocystis ranunculi*, *U. anemones* and *U. floccosa* in samples of 200 spore-balls.

The following new combination is therefore necessary.

Urocystis ficariae (Unger) Henderson, **comb. nov.**

Basonym : *Caeoma ficariae* Unger, Die Exantheme der Pfl. 133 (1833).

Similarly the species with which this note is concerned becomes :—

Urocystis floccosa (Wallr.) Henderson, **comb. nov.**

Basonym : *Erycibe floccosa* Wallr. Fl. Crypt. Germ. ii, 212 (1833).

Urocystis floccosa on various species of *Helleborus* is generally distributed throughout central Europe (Ciferri, 1938) and has recently been recorded in Scandinavia (Jørstad, 1943). In Ainsworth & Sampson's (1950) recent publication " British Smut Fungi," there is no record of any smut on this host genus in Great Britain, although two possible host species with rather sparse distribution occur, namely, *Helleborus foetidus* and *H. viridis*.

Recently a specimen labelled " Ustilago, on *Helleborus viridis*, Coldashton Mill " was found in a duplicate set of C. E. Broome's exsiccati in the Edinburgh Herbarium. There seems little doubt that this is in fact a British collection from Cold Ashton, five miles north of Bath where Broome lived for many years.

Broome's material on *Helleborus viridis* matches continental collections on *H. viridis* and *H. foetidus* but differs from *Urocystis anemones* and *U. ficariae*. Jørstad (1943, p. 237) has shown that within the closely related group of fungi on *Anemone nemorosa*, *Ranunculus repens* and *Helleborus* characterised by a continuous layer of sterile cells surrounding the spores and the frequent occurrence of single spores, three morphologically distinguishable taxa are recognizable. *Urocystis anemones* on *Anemone nemorosa* and *U. ranunculi* on *Ranunculus repens* usually have one or two, rarely more spores per spore-ball, whereas *Urocystis floccosa* on *Helleborus* spp. has a considerable proportion of three-spored balls and some with four spores.

The accompanying histogram expresses the frequency distribution of the number of spores per spore-ball in samples of 200 spore-balls from British collections of these three species.

References

Ainsworth, G. C., & Sampson, K., 1950. The British Smut Fungi. Kew, 137 pp.

Ciferri, R., 1938. Flora Italica Cryptogama, Fungi, Ustilaginales, 443 pp.

Henderson, D. M., & Wilson, M., 1952. Some Scottish Smut Fungi. *Trans. Bot. Soc. Edinb.* xxxvi, 71–73.

Jørstad, I., 1943. The Ustilaginaceous genus Tuburcinia in Norway. *Nytt Mag. Naturv.* lxxxiii, 231–245.

Rogers, D. P., 1953. Disposition of Nomina Generica Conservanda for Fungi. *Taxon*, ii, (2), 29–32.