

Species Information Sheet

Philaenus spumarius

(Meadow Spittlebug)

Distribution and Identification

The Meadow Spittlebug or Common Froghopper (*Philaenus spumarius*) is an extremely common species with a wide-spread distribution across Britain and Ireland.

P. spumarius is extremely variable in colour and pattern, ranging from pale brown through to completely black, broadly divisible between the predominantly pale forms and the mostly black 'melanic' ones (above and below the line, respectively, on the diagram below right). Adults are typically 5-7mm long; females are slightly larger than males. As with all froghoppers, they have two stout spines on the outer edge of the hind tibiae and several smaller spines at the tip. Nymphs have no markings and range from uniform pale yellow when first emerged to lime green in later stages (below left).

Philaenus can be distinguished from *Neophilaenus* species by their more convex outline when viewed from above (as opposed to the more parallel-sided *Neophilaenus*) and their overall pattern of markings. They are much smaller than *Aphrophora* species, although the patterning in the typical (TYP) form of *Philaenus* can appear similar to *A. alni*.

Habitat, Ecology and Lifecycle

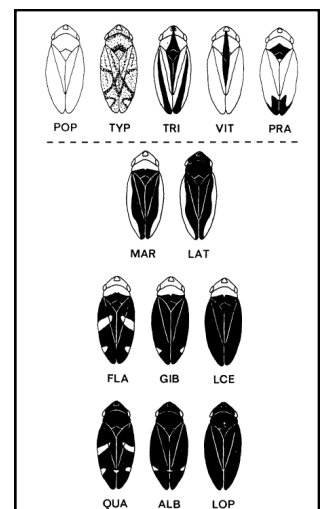
Philaenus spumarius is known to feed on over 400 different plant species. It can be found in most open habitats, including grasslands, gardens and open forests, but it favours herbaceous host plants rather than grasses or trees.

Females lay eggs singly or in groups in the autumn. On emergence the following spring, nymphs begin producing the characteristic spittle 'nests' which provide protection against predators and desiccation. Spittle can be seen from April to late June. The nymph moults five times within the spittle before emerging as a free-living adult. Adults are found normally between June and September, but sometimes as late as November.

As with all froghoppers, *P. spumarius* feeds on the liquid contents of the xylem vessels of its host plant. As such, it is a known vector of the bacterium *Xylella fastidiosa* which has caused the death of many olive trees in southern Europe, although this disease has not been detected in the UK.



Hind tibia showing two stout spines on the outer edge and several smaller spines at the tip



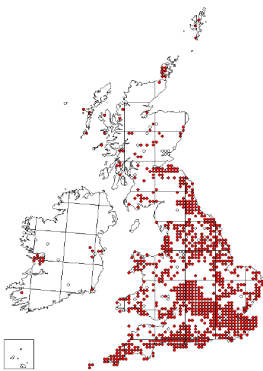
P. spumarius colour morphs



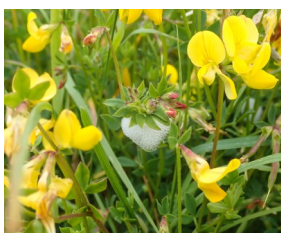
Teneral adult *P. spumarius* newly-emerged from its spittle nest



Adult *P. spumarius*



Distribution of *P. spumarius* as at May 2019



Spittle on Bird's-foot-trefoil



P. spumarius nymph in spittle

BRIGIT is a collaborative research and awareness-raising project aiming to understand and prevent the introduction of *Xylella fastidiosa* into the UK. <https://www.jic.ac.uk/brigit/>

For further information

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