

**The lacebugs *Stephanitis takeyai* Drake & Mao, 1955 and *Derephysia foliacea* (Fallén, 1807) (Hemiptera, Tingidae) at Evesham town, Worcestershire**

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**Introduction**

This account details the finding of the Pieris Lacebug *Stephanitis takeyai* Drake & Mao, 1955 in an urban garden at Evesham, Worcestershire, and discusses ditopism in the lacebug *Derephysia foliacea* (Fallén, 1807) a species which appears not to be imperfectly understood in the midlands.

**Discussion**

**The Pieris Lacebug *Stephanitis takeyai* Drake & Mao, 1955.**

This lacebug is recorded from some English midland counties but up to now not from Worcestershire. The garden in Evesham where *S. takeyai* was found (VC37 52°08'N 1°03'W SP04 38 m a.s.l.) on 1 September 2019 is part of a relatively modern housing development of intensive type on the eastern edge of the town but with a notably well-furnished garden. *Stephanitis takeyai* was observed in all developmental stages on a mature specimen of *Pieris japonica* (Thunb.) D. Don two metres in height growing in a sheltered position. All developmental stages of the lacebug were present and the foliage was characteristically speckled; counting 80 adults (01) did not take very long and these flew readily when disturbed.



01. Adult *Stephanitis takeyai*, Evesham town, Worcestershire, 1 September 2019. Paul Whitehead.

*Stephanitis takeyai* was first observed in Britain during 1998 on *Pieris* plants imported from the Netherlands to Savill Garden, Berkshire during 1995 (Halstead & Malumphy, 2003) and has since moved north (Ryan, 2019). There can be no doubt that this East Palaearctic native, which is invasive in North America, the Indian subcontinent and continental Europe, will have a wider presence in Worcestershire than this finding suggests. It is regarded as a horticultural pest which at Savill Garden proved difficult to control by defoliation and chemical applications. The Evesham record

provides a somewhat dismal testimony to faunal homogeneity associated with the human footstep.



02. Adult *Derephysia foliacea*, Evesham town, Worcestershire, 5 July 2017. Paul Whitehead

**The Foliaceous Lacebug *Derephysia foliacea* (Fallén, 1807)**

The ditopism exhibited by this species is perhaps not fully appreciated; it is associated both with ivy and downland herbs (Aukema, & Hermes, 2006; Southwood & Leston, 1959). In the Czech Republic it has been observed breeding on the moss *Climacium dendroides* (Hedw.) F. Weber & D. Mohr (Štusák, 1957) and elsewhere has been observed on flowering plants such as *Artemisia* and *Thymus* (Aukema & Hermes, 2006) and breeding on Asteraceae in Kazakhstan (Amanbaeva, Esenbekova & Childebaev, 2014). In Britain there is a clear persistent association with calcareous grassland in particular the NVC CG7 plant community. In support of this I can cite personal observations from the North Cotswold escarpment including Cleeve Hill (VC33, 7 August 2014) and also in numbers on Salisbury Plain downland (VC12) during August and September 2001.

Set against this are records from Evesham town, Worcestershire (VC37 SP04) in July 2017 (02), 2018, and 2019 on ivy *Hedera helix* L., (the native species) shrouding fences, and also on the fence timbers beneath. It may be that populations exist on the valley side of the River Avon at Evesham as up to now no nymphs have been seen on fences so that those examples may represent dispersants. According to Leston & Southwood (1961) *D. foliacea* may also be arboreal for example on ivy covering the boles of oak trees in Bedfordshire during August 1960. On Bredon Hill, Worcestershire, *D. foliacea* has been found amongst moss at damp spots on the lower dip slope (e.g. SO93, 10 September 1996) where some were also found under timber.

On the one hand therefore, *D. foliacea* occurs in species rich grasslands in full exposure and on the other it demonstrates synanthropy. The recognised predilection of *D. foliacea* for ivy is

also confirmed for grassland communities where ivy drapes sea-cliffs, for example at Bolt Head in Devon (VC3 SX73 18 August 1993) where ivy and species rich grassland are juxtaposed. The ditopism of *D. foliacea* may therefore be less difficult to understand if one takes into account this insect's apparent preference for good drainage, hard surfaces, and post-breeding shelter.

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