NEW OR UNUSUAL RECORDS

Damage to potato foliage by *Sminthurus viridis* (L.)

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As its common times indicate (*lucerne-flea, clover springtail*) the collembolan *Sminthurus viridis* causes damage mainly to *lucerne* and clover. Records at the Ministry of Agriculture, Fisheries and Food's Harpenden Laboratory since 1925 suggest no association with potato foliage, although in 1939 damage by the springtail *Bourletiella lutea* (Lubb.) was recorded on potatoes in S. Wales (Anon., 1954). The only references found of potato being a host are from S. Australia (Lea, 1920, 1922), also noted by Davies (1928).

On 11 June 1982 young potato plants at Portsoy, Banffshire, were found to be colonized by *S. viridis*. Appreciable numbers of small bleached areas occurred on the upper epidermis, resulting, after leaf growth, in a 'shot-hole' effect, especially on lower leaves (Fig. 1). Extensive examination indicated no other possible cause of the damage, which was widespread in a 4-ha field containing the cultivars Kerr’s Pink and Maris Piper. Damage was more apparent in M. Piper, possibly because of its emergence a week earlier than the other cultivar. The field had been heavily dunged following winter wheat the previous year and appreciable amounts of unburnt wheat straw had also been ploughed in before cropping with potatoes. The elimination of competing weeds by a pre-emergence application of paraquat would have concentrated the springtails on the affected plants. Towards the end of June, under excellent growing conditions, plants grew away from the damage, but feeding continued and extended to the upper foliage and only ceased when early senescence occurred during dry conditions in August.

We thank Mr P. N. Lawrence, British Museum (Natural History) for his determination of *S. viridis*, originally considered to be *B. lutea*, and Mr J. Reaper for the photograph.

REFERENCES


Fig. 1. Potato leaf damaged by the collembolan *Sminthurus viridis* (L.).
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