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Herpetogramma licarsisalis (Walker, 1859) (Lepidoptera: Pyralidae), the Grass Webworm, new *to* Britain

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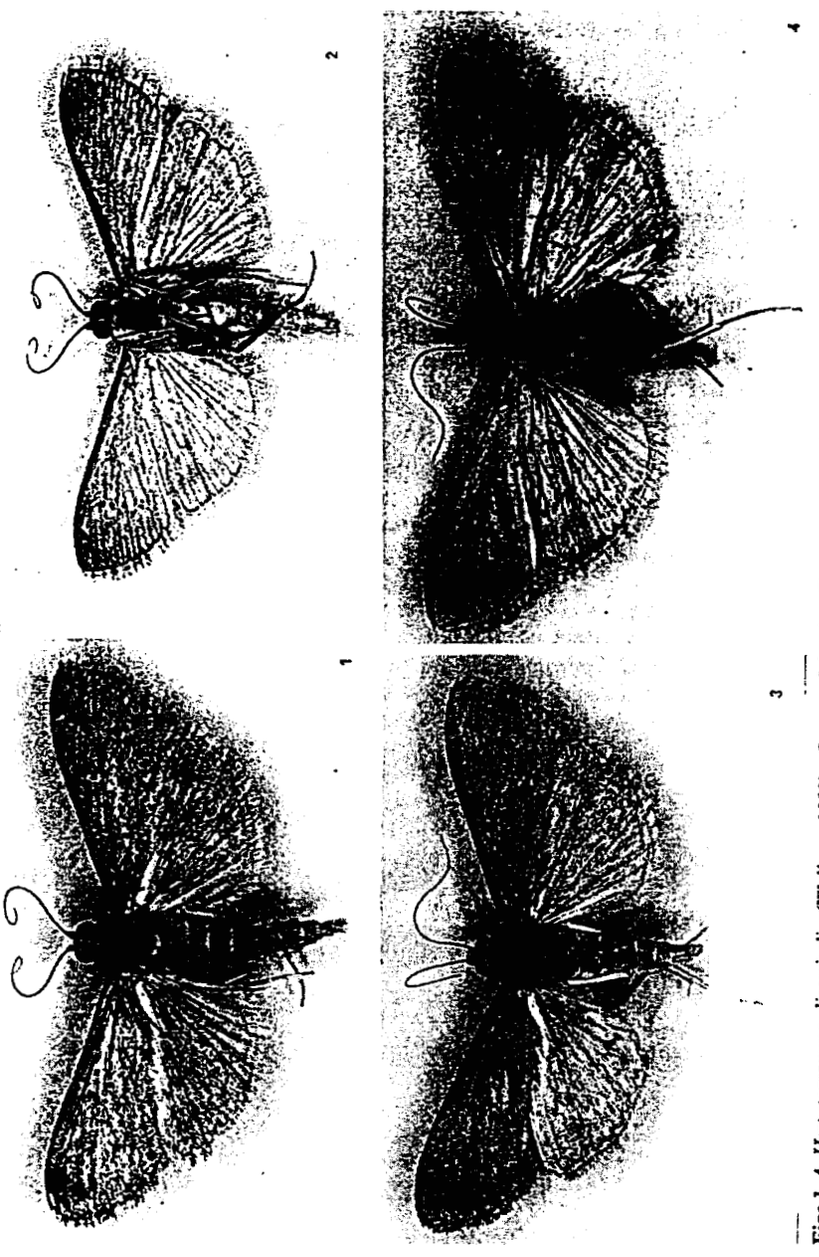
On the night *of 9* November *1998,* **SAK-J** took in the mercury vapour light-trap in his garden a pyralid that was unfamiliar to him. It was tentatively identified over the relephone by BG as *Herpetogramma licarsisalis,* a tropical species that has suddenly appeared in large numbers in southern Spain and Portugal; the identification was confirmed when the specimen, a rnale, was seen a few days later. On the night in question, there was a light, southerly wind and the temperature did not drop below 9°C. Other migrants or probable migrants that appeared in the trap the same night were two *Crocidosema plebejana* (Zeller) (Tortricidae), one *Nomophila noctuella* ([Denis & Schiffermüller]) (Pyralidae) and one *Peridroma saucia* (Hübner) (Noctuidae).

Description of imago

Wingspan *25–26* mrn. Head and thorax pale earth-brown, abdomen slightly paler greyish brown. Costa of forewing arched towards tip, apex acute, termen oblique, dorsum weakly sinuate, the wing matt brown, lacking the gloss of the larger but similarly shaped *Pleuroptya ruralis* (Scopoli); antemedian and postmedian lines rather indistinct, the latter strongly indented below the cell and with short, finger-like lobes distal to the cell; a very faint subterminal shade and a series of blackish, terminal, interncural crescents; a conspicuous, strongly crescent-shaped discal spot and a small dark dot distal to the antemedian line; fringe grey with a narrow, brown subbasal line. Hindwing slightly paler, with rather conspicuous antemedian and postmedian lines, the latter with even more strongly developed finger-like projections, and with a distinct subterminai shade; a series of terminal interneural spots as opposed to crescents; discal spot absent; fringe similar to that of forewing. Underside dirty whitish brown, rather glossy, the nervures prominent, paler than ground colour, the upperside markings weakly represented but with a distinct discal spot on hindwing. A striking feature of the male is a narrow streak of black scent-scales which extends along the costa from the forewing to nearly halfway. The female is superficially very similar, but with slightly broader wings and shorter abdomen.

There are several very similar-looking species of *Herpetogramma* in the tropics of which *H. phaeopteralis* (Guenée), a predominantly New World species, appears to be closest to *H. licarsisalis*. In *H. phaeopteralis,* however, the black costal scent-scales in the maie are lacking. The South African *Herpetogramma aegrotalis* (Zeller), which is illustrated by Goater (1986), had been assigned to *Pleuroptya* (Shaffer & Munroe, 1989) foiiowing detailed comparison of the genitalia, though superficially it couid be easily confused with *H. licarsisalis*.



Figs 1–4. *Herpetogramma licarsialis* (Walker, 1859). Canary Islands: Fuerteventura, Corralejo, 12–23.xi.1997 (*N. M. Hall*). 2, ♂ (1) upperside; (2) underside. 3, 4, ♀: (3) upperside; (4) underside.

Life **history**

The specimens so far recorded frorn the Canary Islands and southern Spain and Portugal have all been between September and November. However, in The Natural History Museurn, London, there are specimens from various parts of the tropics taken in every month of the year except October. According to Harnrnad, El-Minshawy & Saad (1969), adults are frequently observed between May and October in Egypt, resting on the walls, ceilings and windows of buildings. Light-trap records from Saudi Arabia (Hamrnad & Ramadan, 1979) suggested a turnover of 12 generations per annum, and laboratory studies under controlled conditions (Hammad, El-Minshawy & Saad, 1969; Tashiro, 1976) support this. In southern Europe, therefore, *H. licarsisalis* may be expected to produce at least two or three generations during the summer months. The moth flies naturally at night but is easily disturbed by day. It comes freely to light.

The flattish eggs are laid singly or in small groups on the foodplant and hatch in 3–5 days. The larva is of typical slender pyralid forrn, the head flattish, the body tapered at each end; when full-fed about **20** mm long, somewhat translucent light brown to light green, slightly darker above the fine, pale lateral line; head black in first instar, then light brown with darker markings; prothoracic plate paler. It feeds at night on the foliage and culms of grasses, Poaceae (Gramineae), mostly tropical lawn-grasses and pasture grasses, but also rice (*Oryza*), rnaize (*Zea*) and millets (*Sorghum* spp.), living in a tube made frorn rolled leaves of the foodplant, lined with silk, at ground level (see Tashiro, 1976; Zhang, **1994;** Herbison-Evans & Crossley, www, 1998). Within its tube, the larva can move forwards or backwards with equai facility, an ability shared by many pyralid larvae. In the tropics, it **is** a serious pest of pastures and lawns and can be expected to become troublesome on the new golf courses **of** southern Iberia.

Pupation occurs in a loosely woven cocoon at ground level and the imago ernerges (in the tropics) in about one week.

Distribut**ion**

Herpetogramma licarsisalis is a widespread species in the Old World tropics including parts of central Africa, Sierra Leone, Egypt and Saudi Arabia, its range extending to Malaysia and Hong Kong, the Philippines, Australia and New Caledonia. It is a serious grass pest in Hawaii (Mitchell, www, 1998), but does not seem to have been reported from South or North America. The first European record was rnade as recently as 1937, in the Algarve, Portugal, and in the same year it was found comrnonly on Fuerteventura, Canary Is, in November (N. Hall, pers. comm.). In 1998, the species was found in great abundance in several places in sourhern Spain and Portugal (M. F. V. Corley, in prep.). This sudden and rapid colonisation indicates a northward extension of its range. Whether or not it reaches Britain as a colonist rernains to be seen but, providing the southern European populations are maintained, *H. licarsisalis* may be expected to become a regular immigrant here.

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