



## NOTE

### Observations on the life history of the Southern Pied Woolly Legs, *Lachnocnema laches* Fabricius, 1793 (Lycaenidae: Miletinae) in the Mpumalanga lowveld

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For many years the authors had wished to breed any *Lachnocnema* species from egg or larval stages. Known larvae of members of this butterfly genus are predatory on members of the Homoptera insect group (Clark & Dickson, 1971: 248–9). The authors' first encounter with a *Lachnocnema* sp. had occurred many years ago when they lived at the Hans Hoheisen Wildlife Research Station (HHWRS), which lies close to the Orpen Gate of the Kruger National Park.

Some adult *Lachnocnema* individuals were seen feeding amongst a 'herd' of plant lice on a tree in the garden. Soon after a larva of some kind was found feeding on the plant lice and this was collected for breeding purposes. With much care the larva was fed on aphids and later pupated. Not having much experience at that stage with the various forms of lycaenid larvae, it was assumed that this larva was of *Lachnocnema* origin. Unfortunately when the adult emerged from the pupa, an unidentified hairy fly sat in the container – it must have been a fly larva!

Following this experience the authors became determined to find and breed any *Lachnocnema* sp. When living on a property north of the HHWRS, an opportunity presented itself in October 2012 when a number of adult *Lachnocnema* sp. were seen flying about a group of *Phyllanthus reticulatus* Poir (Euphorbiaceae) bushes. On closer inspection it was noted that a number of homopteran nymphs were the source of interest to the butterflies. Photographs were taken of the butterflies for submission to SABCA and, whilst editing the photographs on a computer, a typical Lycaenid egg was noted on a branch in one of the photographs (Fig. 1).



Figure 1 – *L.laches* ovum found on *Phyllanthus reticulatus*

The egg was located and collected back at the site and the bushes were thereafter under constant surveillance for either more eggs or hatched larvae. More eggs were found and they hatched successfully. The newly emerged larvae had to be fed and so branches with sufficient numbers of the homopteran nymphs were cut and placed in a container for what was now presumed to be *Lachnocnema* sp. larvae. A small *P. reticulatus* plant was also potted and a constant population of the prey nymphs kept for feeding the larvae. It was noted that during the day the nymphs would enter burrows around the plant roots that were constructed by ants tending the nymphs. The *Lachnocnema* larvae would follow them into these burrows. Initially we had thought that the larvae had died but were pleased to discover that they were only in hiding.

From the descriptions in Picker *et al.* (2004:146), the nymphs belong to the family Tettigometridae and, as only two genera are known in South Africa, they had to be either a *Tettigometra* or *Hilda* species. The larvae were seen to be actively hunting the tettigometrid nymphs and devouring them with relish (Fig. 2).

A rock lying against the stem of the potted plant was also a good hiding place, and when a final instar larva went missing, it was found under this rock (Fig. 3). This protected location was also where a typical lycaenid pupa was eventually discovered (Fig. 4).

Some of the *Lachnocnema* sp. adults were netted at the bushes where the eggs were initially collected in an attempt to identify the species through the upper wing patterns of the females. Both males and females were caught and the identification was confirmed as *Lachnocnema laches* Fabricius, 1793. The male upperside was obviously not diagnostic but the female showed the distinctive pied colouring with large white discal patches. Final confirmation was obtained when photographs of the adults were submitted to the

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**Figure 2** – *L.laches* larva feeding on tettigometrid nymph



**Figure 3** – Late 3<sup>rd</sup> instar *L. laches* larva on rock



**Figure 4** – *L. laches* pupa attached to a rock at the base of the potted food plant



**Figure 5** – *L.laches* adult male freshly emerged

SABCA Virtual Museum (VM 26543) and identified by a panel of experts.

Some six months later during April 2013, more *Lachnocnema* sp. larvae were discovered by accident while collecting food for moth larvae as part of the South African Moth Challenge project. These larvae were found on the picked branches of *P. reticulatus*. The larvae were kept and fed until the formation of pupae. It will only be known which *Lachnocnema* sp. they are when the adults emerge.

#### FOOTNOTE

The occurrence of the Southern pied woolly legs (*Lachnocnema laches* Fabricius, 1793) in South Africa was only recognised in the 1990s. Pringle *et al.* (1994: 139) only recorded the presence of the Common woolly legs (*Lachnocnema bibulus* Fabricius, 1793). According to Woodhall (2005: 150) the females can be visually distinguished from *L. bibulus*, but the males can only be separated from *L. bibulus* with certainty by genitalic dissection.

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