A rare teratology in the harvestman *Lophopilio palpinalis* (Opiliones: Phalangiidae)

**Jinze Noordijk**
**Theodoor Heijerman**
European Invertebrate Survey/Naturalis Biodiversity Center,
PO Box 9517,
2300 RA Leiden, The Netherlands
email: jinze.noordijk@naturalis.nl

**Roy Morssinkhof**
Nobelweg 22,
6706 GA Wageningen, The Netherlands

**Introduction**

In many animal species, harvestmen alike, abnormalities in individuals occur. Synonyms of these deviations of the body are, among others, deformities, anomalies and malformations (e.g. Juberthie 1963a, Stoll 1998). Abnormalities that are the result of embryonal or post-embryonal development are specifically called teratologies or monstrosities (e.g. Juberthie 1968). Some abnormalities might arise from damage to the body, as has been shown in regenerating legs of *Trogulus* harvestmen that have probably been eaten by shrews (Novak et al. 2006). An eye-catching abnormality is gynandromorphy, an organism having both male and female characteristics. These are conspicuous anomalies, that are relatively often described in harvestmen (e.g. Blaszak 1968; Chemini 1984; Cokendolpher & Sissom 1988; Gnaspini 2007). Other reported abnormalities in harvestmen are aberrations on or fusions between legs, chelicera and pedipalps and its segments (e.g. Hadži 1928; Juberthie 1968; Schultz & Pinto-da-Rocha 2007; Kozel & Novak 2013). In the review papers of Juberthie (1963a) and Mitov (1995), many abnormalities are given, like the fusion between tergites, sternites and deformities of the prosoma, trident and abdominal sculpture.

There are also published records on eye abnormalities in harvestmen. Cirdei (1955 in Juberthie 1963a) and Stoll (1998) each described an individual, respectively of *Lacinius ephippiat us* C. L. Koch, 1835 and *Oligolophus tridens* C. L. Koch, 1836, without an ocularium but with a single eye positioned flat on the prosoma. Holmberg & Kokko (1983) described an individual of *Togwoteeus biceps* (Thorell, 1877) (as *Homolophus biceps*) without eyes and ocularium, similar to the abnormality we describe here.

**Material and methods**

In order to gain insight in the distribution of the harvestman fauna of the Netherlands, pitfall trapping is employed at many locations across the country. Two deciduous forests where we collected samples are Wijlre Bossen (Wijlre, community Gulpen-Wittem) in 2011–2015, and Meerdink Estate (Woold, community of Winterswijk) in 2013.

From the samples of these forests, deformed specimens of *Lophopilio palpinalis* (Herbst, 1777) (Fig. 1) were retrieved. As the pitfall traps were filled with a formol solution, the harvestmen were shrunk and stiffened. The specimens were not examined on maturity and sex, but left intact and stored in the collection of JN.

*Lophopilio palpinalis* is restricted to Europe, where it is wide ranging (Martens 1978). In the Netherlands, it lives in the litter layer of forests, thickets, roughs and grasslands (personal observations JN).