



The genus *Gelanes* Horstmann (Hymenoptera: Ichneumonidae: Tersilochinae) from South Korea, with description of four new species

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Abstract

The genus *Gelanes* Horstmann is recorded from South Korea for the first time. Eight species of the genus are found to occur in this country. Four species, *G. dentator* sp. nov., *G. protritus* sp. nov., *G. provectus* sp. nov. and *G. verendus* sp. nov., are described as new, three species, *G. belokobylskii*, *G. cuspidatus* and *G. simillimus*, also occur in the Russian Far East, and *G. gubarevae* was previously known only from Europe. A key to the South Korean species of *Gelanes* is provided.

Key words: Palaearctic, parasitoid, new species, taxonomy

Introduction

Gelanes is a moderately large Holarctic genus of 16 species. All described species are Palaearctic, whereas the Nearctic fauna is not described. The genus was described by Horstmann (1981) in the second part of his revision of the European fauna of Tersilochinae and includes four species (two of which were previously considered as part of the genus *Tersilochus*). Khalaim (2002) reviewed the Palaearctic fauna and described six more new species: four species from the south of the Russian Far East, one species from Turkmenistan, and one species from the Carpathians in Ukraine. Later a key to seven species of *Gelanes* of the Russian Far East was published; the European species *G. clypeatus* (Horstmann) was recorded from Khabarovsk region, and *G. cuspidatus*, firstly described from Russian Far East, was found in Europe (Khalaim 2002, 2007). Recently a review of the European species was published by Khalaim & Blank (2011). In this paper, four new species of *Gelanes* are described.

In contrast with other Tersilochinae genera which predominantly parasitize coleopteran hosts, all known species of *Gelanes* are parasitoids of *Xyela* larvae (Hymenoptera: Xyelidae) developing in male pine cones (Khalaim & Blank 2011). The host-parasitoid relations of the genus *Gelanes* seem to be well studied compared with other genera of the subfamily; in particular, 10 of the 12 known European species were reared from five species of *Xyela* occurring on five species of the genus *Pinus*. Adult parasitoids fly predominantly from April to June, during which their hosts developing in male pine cones become available.

Material and methods

This work is based on material from the ichneumonid collection at Yeungnam University, Republic, Korea (YNU). Over 150 specimens of the genus *Gelanes* have been studied. The following abbreviations are used throughout the text: **TD**, type depository; **TS**, type species; **GB**, Gyeongsangbuk-do; **GG**, Gyeonggi-do; **GN**, Gyeongsangnam-do; **GW**, Gangwon-do; **JN**, Jeollanam-do.

Most material, including the holotypes of new described species, is kept in the Yeungnam University