

A NEW GENUS AND ONE NEW SPECIES UNDER SUBFAMILY GNORIMINAE  
CHAUDHRI FROM INDIA (ACARINA : PHYTOSEIIDAE)

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ABSTRACT

*Garhwalicus*, a new genus under subfamily Gnoriminae Chaudhri, family Phytoseiidae, is proposed here to accommodate *Garhwalicus himalayensis* described as new to science from India.

INTRODUCTION

Chaudhri (1975) erected the subfamily Gnoriminae from Pakistan with *Gnorimis tabella* Chaudhuri as its type species. He diagonalised the subfamily by having: 1. 12 pairs of lateral setae, 2. 3 pairs of sublateral setae, 3. 2 pairs of setae around ventrianal shield and 4. 6 pairs of preanal setae. The present material examined by the authors is very interesting in the sense that it also possesses 3 pairs of sublateral setae and 12 pairs of lateral setae but it differs from the former in having 1. 7 pairs of preanal setae. In addition, the genital shield is quite peculiar and in sharp contrast with that of *G. tabella*. Weighing the similarities and dissimilarities of characters it is considered that the present species can very well be fitted in the subfamily Gnoriminae provided the definition of the subfamily is slightly modified in the light of characters as exhibited by the present material. However, it will not be proper to

place the species in the genus *Gnorimus* as 1. structurally the genital and sternal shields are different, 2. metasternal and metapodal plates are absent and 3. ventrianal shield being robust with 7 pairs of preanal setae. In view of these sharp differences from *Gnorimus*, a new genus, viz. *Garhwalicus* under the subfamily Gnoriminae is proposed here to accommodate the new species.

The present paper re-diagonalises the subfamily, a new genus is proposed giving diagnostic characters and the new species is described and illustrated. The type of the new species is deposited in the collection of the Zoological Survey of India. The setal nomenclature as of Rowell *et al.* (1978) is followed. The measurements given in the text are in microns.

Subfamily GNORIMINAE

*Diagnosis* : Dorsal shield light to heavily sclerotized with 12 pairs of lateral setae

of diverse shape and nature, 3 pairs of sublateral setae, 2 pairs of setae present on membrane around ventrianal shield, ventrianal shield large to robust, reticulate with 6-7 pairs of preanal setae, a pair of paranal and a long serrate postanal seta present, a fold like structure present on ventrianal shield little anterior to anal region. Type genus : *Gnorimus* Chaudhri, 1975.

Key to the genera of GNORIMINAE

1. Ventrianal shield with 7 pairs of preanal setae, metapodal and metasternal plates absent. ...
- Ventrianal shield with 6 pairs of preanal setae, 2 pairs of metapodal plates and one pair of metasternal plates distinctly present. ...

*Garhwalicus*  
gen. nov.

*Gnorimus*  
Chaudhri

Genus *Garhwalicus* gen nov.

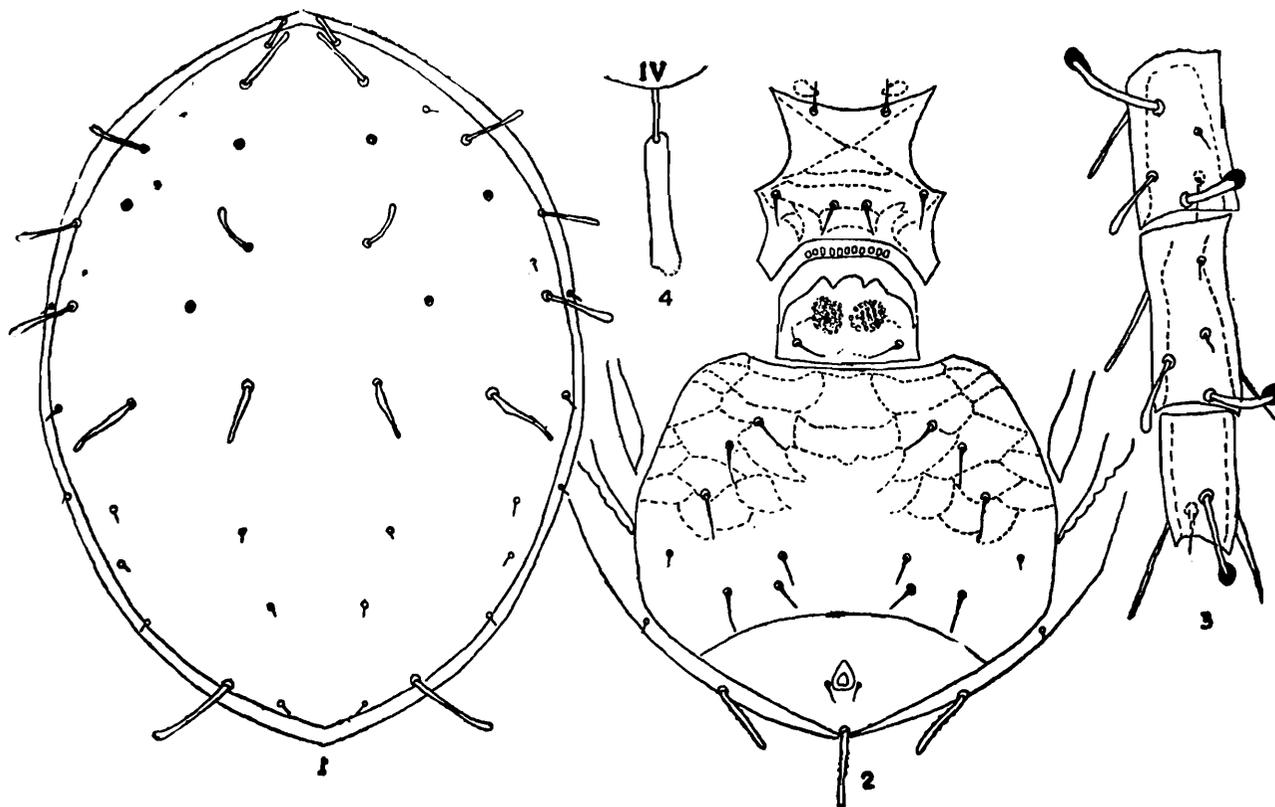
*Diagnosis* : Dorsal shield heavily sclerotized with 12 pairs of lateral setae of diverse sizes, 3 pairs of sublateral setae, ventrianal shield robust, reticulate with 7 pairs of preanal setae, metapodal and metasternal plates absent, sternal shield robust, reticulate with 3 pairs of conspicuously long setae.

Type species : *Garhwalicus himalayensis* sp. nov.

*Garhwalicus himalayensis* sp. nov.

(Figs. 1-4)

*Female* : Dorsal shield 370 long, 278 wide, heavily sclerotized smooth, with 12 pairs of setae in lateral series, 6 pairs on dorsocentral series and 2 pairs on median series ; 3 pairs of sublateral setae present on interscutal membrane. Most of the dorsal setae rod like, a few with widened base ; some



Figs. 1-4. *Garhwalicus himalayensis* sp. nov., female : 1. Dorsal shield ; 2. Ventral surface ; 3. Leg IV ; 4. Spermatheca.

of the setae both on lateral and dorsocentral series small. Measurements of setae : j1-18, j4-31, (setae broken, not represented in slide), j5-29, j6-34, J2-7, J5-4, j3-38, z2-5, z3-44, z4-36, (setae broken in slide), s4-5, s5-44, Z1-6, S2-44 (broken in slide), S3-5, S4-5, S5-5, Z5-60, z1-broken, Z4-6, Interscutal membrane heavily sclerotized with 3 pairs of sublateral setae measuring : r3-38, R1 and R4 being small. Ventrally the sternal shield reticulate, 67 long, 100 wide, with 3 pairs of moderately long sternal setae ; metasernal plate with seta absent. Genital shield granulated on either sides of the shield, 67 wide, with a pair of genital setae. Ventrianal shield robust, 190 long, 210 wide, reticulate anteriorly with 7 pairs of preanal setae ; a distinct fold present on the shield little anterior to the anal region. One pair of paranal and a conspicuously long rod like serrate post anal seta present ; 2 pairs of setae present on the membrane around ventrianal shield : JV5-51 long. Leg IV with 2 macrosetae on genu (one large 27 long, second one 18 long), tibia also with 2 macrosetae (18 and 20 long), basitarsus with one macroseta-22 long-all being spatulate. Spermatheca as figured. Chelicera not possible to examine because of position of the specimen. Peritreme extends anteriorly upto z3.

*Material* : Holotype : ♀, INDIA : Uttar Pradesh, Uttar Kashi, Siror vill., 6. ix. 1979, ex undetermined plant. Coll. S. K. Gupta, (ZSI Reg. No. 3177/17).

*Remarks* : This new species is easily recognised by having 2 pairs of spatulate macrosetae on each of genu and tibia of leg IV, in having characteristic setae on dorsal shield, in having serrate and rod like post-anal, seta and by granulation of genital shield.

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#### REFERENCES

- CHAUDHRI, W. M. 1975. New subfamily Gnoriminae (Acarina : Phytoseiidae) with the new genus *Gnorimus* and description of new species *Gnorimus ta'ella* from Pakistan. *Pakist. J. Agri. Sci.*, **12** (1-2) : 92-102.

