

## A NEW SPECIES AND A SUB-SPECIES OF GALUMNIDAE (ORIBATEI) FROM KERALA, INDIA

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ORIBATEI	ABSTRACT : Two new oribatids — <i>Cryptogalumna grandjeani</i> sp. nov. and <i>Flagellozetes porosus indicus</i> sub-sp. nov. are described from Kerala, India. The two
FROM	genera are being reported for the first time from India.
INDIA	
ORIBATES	RÉSUMÉ : Les deux nouveaux Oribates, <i>Cryptogalumna grandjeani</i> sp. nov. et
DE	<i>Flagellozetes porosus indicus</i> sub-sp. nov., sont décrits du Kérala, Inde. Les deux
L'INDE	genres sont reportés pour la première fois de l'Inde.

The galumnid genera *Cryptogalumna* Grandjean, 1957 and *Flagellozetes* Balogh, 1970 are hitherto known only by their type species from Spain and Ceylon respectively. The second species of *Cryptogalumna* and a sub-species of *Flagellozetes* are being described from Kerala, India.

### *Cryptogalumna grandjeani* \* sp. nov.

**Colour** : Light yellowish brown.

**Dimensions** : Length : 344  $\mu\text{m}$ .

Width : 230  $\mu\text{m}$ .

Height : 166  $\mu\text{m}$ .

**Prodorsum** (Figs. 1-3) : Surface with minute, densely set punctations ; interlamellar setae minute ; lamellar and rostral setae small and barbed, length of the former equal to or slightly more than the distance between the two ; line *S* poorly developed, only the posterior half being visible ; sensillus spatulate and thickly barbed ; dorsosejugal suture arcuate posteriorad.

**Notogaster** (Figs. 1, 3) : Punctations thicker than those on prodorsum ; areae porosae *Aa*, *A*<sub>1</sub> and *A*<sub>3</sub> without definite boundaries ; *A*<sub>2</sub> (?) represented by 2-3 pairs of small pores located posterior to the level of the median pore ; 10 pairs of minute setae ; lateral protuberance distinct ; a diffuse ramifying venation present anteriorly in a few specimens ; pteromorphae punctate with poor venation.

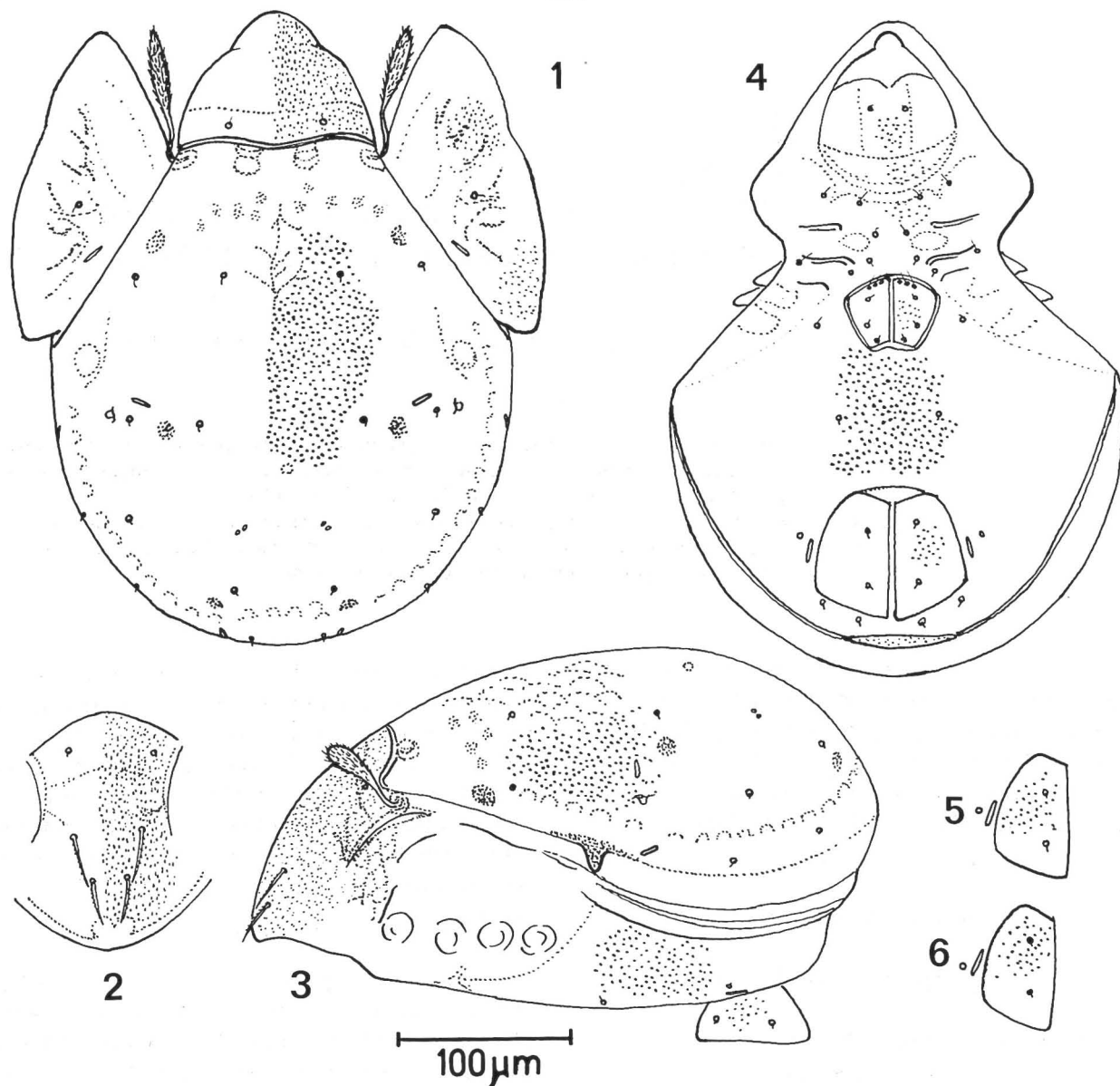
**Ventral side** (Fig. 4) : Entire surface thickly punctate ; epimeral setal formula 2-1-2-2 ; 6 pairs of genital, 1 pair of aggenital, 2 pairs of anal and 3 pairs of adanal setae ; *ad*<sub>3</sub> located lateral to the anterior end of *iad* in most specimens, but lateral to the mid-point or posterior end of *iad* in a few specimens (Figs. 5, 6) ; postanal area porosa long.

**Legs** : All legs tridactylous and heterodactylous.

**Material examined** : Holotype : ♀ ; paratypes : 3 ♂♂ and 5 ♀♀ collected from grass and humus below coconut palm. Tellichery, Kerala, India. 18.12.1980.

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\* This species is dedicated to Prof. Dr. François GRANDJEAN.

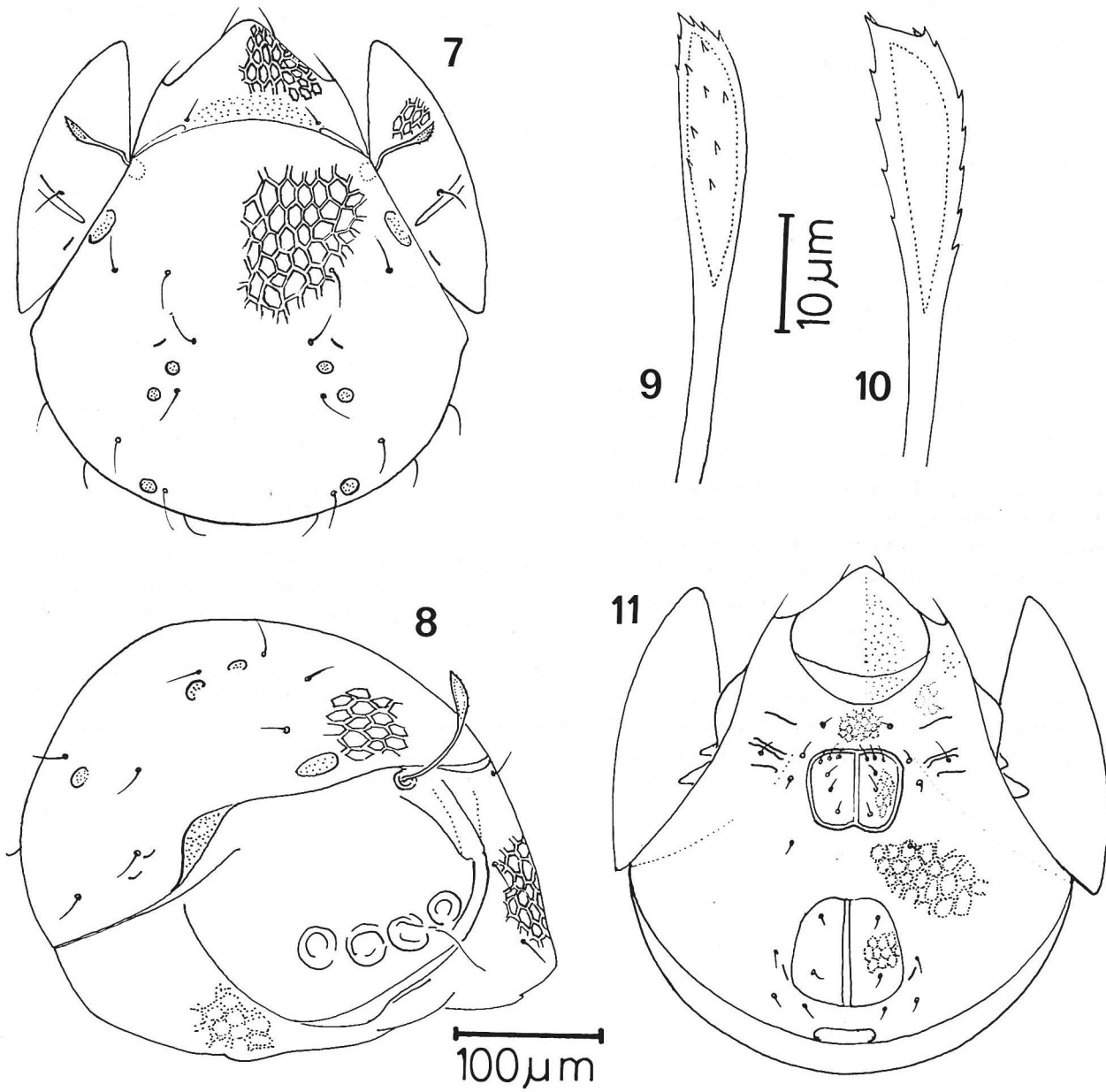


FIGS. 1-6 : *Cryptogalumna grandjeani* sp. nov.

1. — Dorsal side ; 2. — Frontal view of prodorsum ; 3. — Lateral side ; 4. — Ventral side ; 5 and 6. — Variations in the position of  $ad_3$ .

**Remarks :** The genus *Cryptogalumna*, with *C. cryptodonta* as the type species, was erected by GRANDJEAN (1957) on the basis of a single female specimen collected from Córdoba, Spain. The presence of a lateral protuberance within the hysterosoma separates this genus from other genera of Galumnidae (BALOGH, 1972). The pre-

sent species differs from the type species in (1) the possession of poorly developed line  $S$ , (2) the position of  $ad_3$  in relation to  $iad$ , (3) epimeral setal formula of 2-1-2-2 and (4) having relatively longer lamellar and rostral setae.



FIGS. 7-11 : *Flagellozetes porosus indicus* sub-sp. nov.

7. — Dorsal side ; 8. — Lateral side ; 9 and 10. — Head of the sensillum under different views ; 11. — Ventral side.

**Flagellozetes porosus indicus** sub-sp. nov.

*Colour* : Dark brown.  
*Dimensions* : Length : 485-536  $\mu\text{m}$ .  
Width : 408-434  $\mu\text{m}$ .  
Height : 383-421  $\mu\text{m}$ .

*Prodorsum* (Figs. 7, 8) : Integument with polygonal sculpturing ; interlamellar, lamellar and rostral setae small ; sensillar head dilated, and provided with a few barbs (Figs. 9, 10) ; dorsosejugal suture arcuate ; areae porosae dorsosejugales long ; lines *L* and *S* located close together ; line *L* elevated, and merging with the circumpedial line.

*Notogaster* (Figs. 7, 8) : Entire surface with regular polygonal sculpturing ; 10 pairs of short flagelliform setae ; 4 pairs of areae porosae ; *Aa* slightly long ; *A*<sub>1</sub>, *A*<sub>2</sub>, and *A*<sub>3</sub> rounded ; *A*<sub>2</sub> located more closely to *A*<sub>1</sub> ; *A*<sub>2</sub> absent from 2 paratypes ; pteromorph setae similar to other notogastral setae ; hysterosoma laterally with a pair of slightly elevated punctate areae resembling areae porosae.

*Ventral side* (Fig. 11) : Infracapitulum with thick punctations ; epimeral and anogenital region with polygonal sculpturing ; epimeral formula 1-0-2-1 ; 6 pairs of genital, 1 pair of aggenital,

2 pairs of anal and 3 pairs of adanal setae ; *iad* located close to the posterior corners of the anal aperture ; postanal area porosa long.

*Legs* : All legs tridactylous and heterodactylous.

*Material examined* : Holotype :  $\sigma$  ; paratypes : 5  $\text{♀♀}$  and 2  $\text{♂♂}$  — collected from forest floor. Nilambore, Kerala, India. 15.5.1982.

*Remarks* : The material differs from *F. porosus* Balogh, 1970 in the possession of (1) barbed sensillus, (2) shorter notogastral setae, and (3) in the position of *A*<sub>2</sub> very close to *A*<sub>1</sub>.

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