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First record of genus *Kribiocosmus* KIEFFER from the Oriental Region, with description of *K. tumulus* spec. nov. from India (Insecta: Diptera: Chironomidae)

With 4 Figures

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Abstract. A new species *Kribiocosmus tumulus* is described from the Himalayas of India. This is the first record of that genus from the Oriental Region.

KIEFFER (1921) recognized the monotypic genus *Kribiocosmus* after the afrotropical species *Kribiocosmus ornatipes* KIEFFER which automatically becomes the type-species of the genus. Though the genus shares many common features with the genera *Lauterbornella* KIEFFER, *Polypedilum* KIEFFER and *Stictochironomus* KIEFFER, its validity of generic rank has been confirmed by ASHE (1983). Before this study, *Kribiocosmus* was reported from the afrotropical French Cameroons only.

In this paper, a new species of that genus has been described from the Himalayas of West Bengal, India. Morphology and terminologies used in the account of the species follow SAETHER (1980). Type-specimens are deposited in the National Zoological Collections, Calcutta, and will be deposited in the Natural History Museum, London, and Staatliches Museum für Tierkunde Dresden.

Kribiocosmus tumulus spec. nov. (Figs. 1.1–1.4)

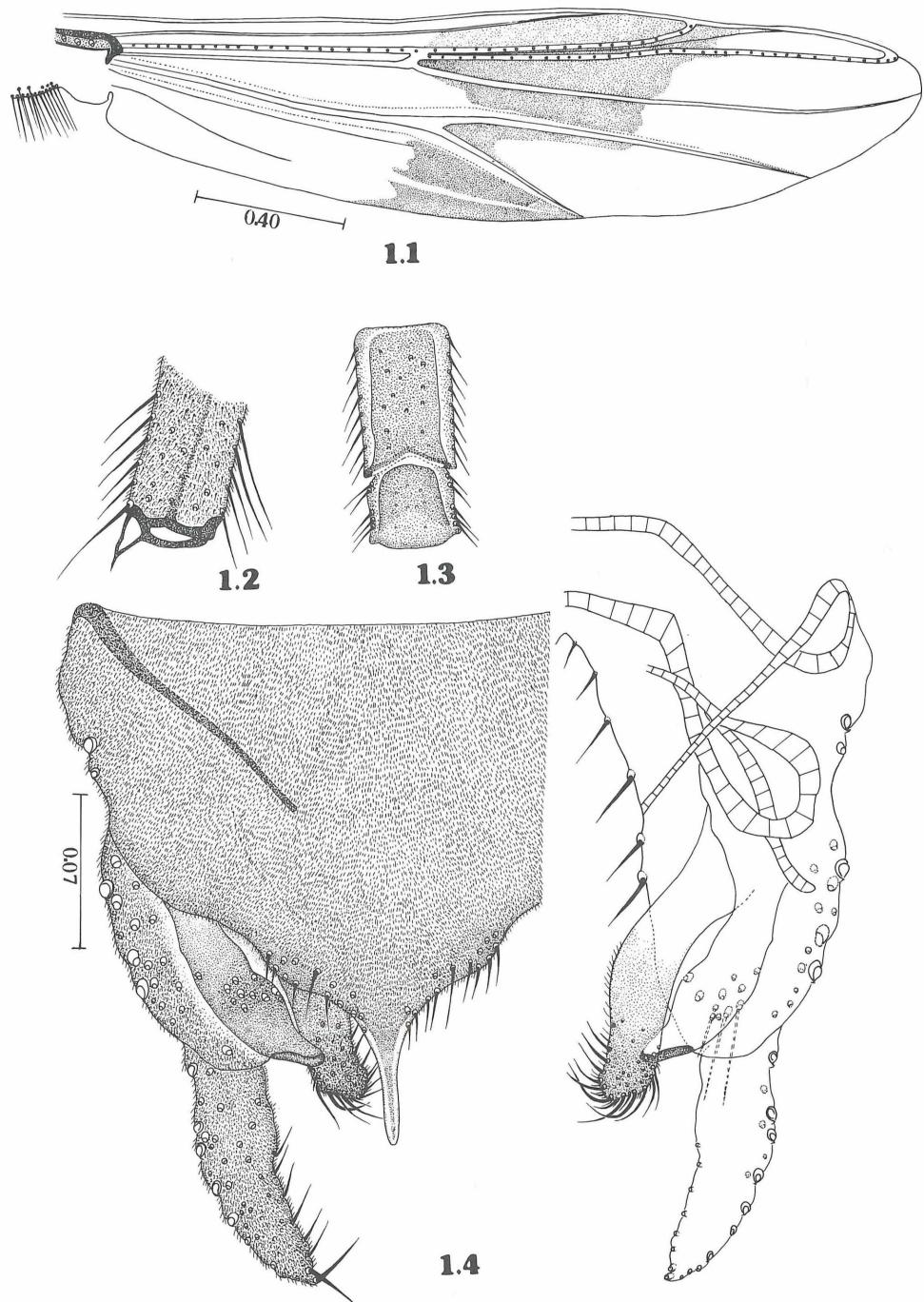
Male: Body length 3.05 mm (3.05–3.24 mm, n = 4), wing length 1.45 mm (1.45–1.48 mm, n = 4) and wing breadth 0.50 mm (0.49–0.50 mm, n = 4).

Head: Vertex with 18–20 setae (IV 6–7, OV 11–12 and PO 1). Corona with 10–12 very minute setae. Clypeus with 39–40 long curved setae, clypeal ratio 0.86. Maxillary palp dark grey, palpi well developed, thickly clothed with numerous hairy bristles, length ratio of palpomeres I–V 15:52:18:21:43, L/W ratio 1.8. Eyes little arched with a dorsomedian extension of 0.08. Antenna light grey, length ratio of flagellomeres I–XIII 16:9:9:7:7:7:7:7:9:168, AR 1.69; CA 0.47; CP 0.83.

Thorax: Yellow with brownish tinge and characteristic markings. Antepronotum with a narrow emargination, antepronotal 0.1; mesonotum with dark brown vittae and a pair of conspicuous grey spots alongwith the lines of dorsocentral bristles on each side, acrostichals 5–6 uniserial, dorsocentrals 10 uniserial, humerals 3, prealars 4 and scutellars 22 in two irregular transverse rows, postnotum dark grey and bare.

Wing (Fig. 1.1): With smoky appearance and prominent veins, microtrichia and spots distributed as: i) a rectangular cloud at the middle of wing almost covering the cells r_1 , basal half of r_5 and m_2 , ii) one large triangular dark grey spot towards apex of cell an . Brachiolum with 3 setae and 50–52 sensillae campaniformia; R with 21; R1 with 17–19 and R4–5 with 34–36 setae. Squama fringed with 17 setae. Haltere light yellow and bare. CR 1.02; VR 1.15.

Legs: Yellow with brown markings. Femora with median and apical dark brown bands; tibiae with basal and apical dark brown broad bands, tarsomeres I–III with apical broad markings, tarsomere IV



Figs. 1.1–1.4: *Kribiocosmus tumulus* spec. nov., ♂: 1.1 – wing; 1.2 – fore tibial scale; 1.3 – abdominal segments VII–VIII; 1.4 – hypopygium.

Table 1 *Kribiocosmus tumulus* spec. nov., ♂: proportion and ratio of leg segments.

	Fe	Ti	ta ₁	ta ₂	ta ₃	ta ₄	ta ₅	LR	BV	SV	BR
Fore leg	64	62	44	22	14	9	6	0.70	3.33	4.34	2.62
Mid leg	74	66	58	34	21	13	6	0.87	2.67	3.50	1.55
Hind leg	65	71	85	38	32	32	13	1.19	2.00	1.88	1.85

with an apical and a median band at its distal two thirds and tarsomere V brown. Fore tibia with a sharp triangular scale (Fig. 1.2) bearing 2 unequal spurs; spurs of mid tibia curved downward, 0.024 and 0.018 mm long, ratio of length of spurs to the apical diameter of mid tibia 8:5 and 6:5; spurs of hind tibia slightly curved, 0.021 and 0.18 mm long, ratio of length of spurs to the apical diameter of hind tibia 7:10 and 6:10.

Abdomen: Yellow in colour with profuse setae (Fig. 1.3) over tergites having a characteristic ridge on tergite IX. Hypopygium (Fig. 1.4): Anal point tubular, 0.033 mm long, with 5 setae at each side basolaterad. Gonocoxite long, little bent inward, with 18–19 strong setae over it; gonostylus also stout, narrow and strongly pubescent, having 1 apical and 7 small curved setae at its inner apical margin. Superior volsella stout, gently bowed outward, with thickened outer apical part and with 14–15 long setae over it; inferior volsella long, finger-like, little bent at its base and with 27–28 long, curved setae at its lower part. Transverse sternapodeme 0.039 mm, lateral sternapodeme 0.057 mm, coxapodeme 0.051 mm and phallapodeme 0.048 mm long. HR 1.04; HV 3.63.

Female: Unknown.

Holotype ♂ (Type no. 211, B.U.Ent.), Gorubathan, West Bengal, 18. X. 1984, coll. T.K. Dutta. Paratypes 3 ♂♂, same data as holotype.

Remarks: In consideration of its prevalence in the hilly areas, the species has been named *Kribiocosmus tumulus* nov. spec. It exhibits sharply contrasting features in comparison to *Kribiocosmus ornatus* KIEFFER, so far only known member of the genus, in respect to all morphological structures, especially the hypopygium and pattern of wing spots. But a critical appraisal suggests that the present species should now be treated as a new member of *Kribiocosmus* on the basis of the following combination of characters: i) mesonotum with conspicuous grey spots, ii) wing with characteristic pattern of markings, iii) hypopygium with stout, tubular anal point bearing 5 setae at each basolaterad margin, iv) superior volsella stout, gently bowed ventrally, with thickened outer apical part, and v) inferior volsella long, digitiform, little bent at its base and with strong setae at its lower part.

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