

TWO NEW TERMITES OF GENUS *GLYPTOTERMES* (KALOTERMITIDAE)
FROM THE GREAT NICOBAR ISLAND, INDIAN OCEAN

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ABSTRACT

The two new species, *Glyptotermes krishnai* and *G. nicobarensis* based on both Imagos and soldiers are described from the Great-Nicobar Island in the present paper. The former species can easily be separated from all other Oriental species of the genus *Glyptotermes* in having a much larger, thick, outer, apical tibial spur on the fore leg and very prominent tubercles on frons, on either side, a little above antennal sockets. The latter is compared with *G. almorensis* from U. P. and *G. minutus* from Sri Lanka. Incidentally the genus *Glyptotermes* with these two new species is recorded for the first time from the Great Nicobar Island, Indian Ocean.

INTRODUCTION

The genus *Glyptotermes* Froggatt (1896) is widely distributed in all the zoogeographical regions except the Palaearctic and the Nearctic Regions and is represented by one fossil and 74 living species of which 24 species are so far known from the Orient. However, while studying a fairly large collection of termites collected under a special project on "Xylophagous Insects of the Islands of Andaman and Nicobar", the authors came across two new species which are described in the present paper. Incidentally, this is the first record of the genus *Glyptotermes* from this island represented by these species.

1. *Glyptotermes krishnai*, new species

Material : One vial with 12 soldiers, 1 dealate, several pseudoworkers and imagonymphs from Champa Bay, Great Nicobar Island, Stn. No. 14, F. C. No. 1, P. K. Maiti and party coll., 31.xii.1975, ex. "stump of recently felled jungle Mewa".

Description : 1. IMAGO (DEALATE)
Fig. 1, Table 1) :

Head-capsule, pronotum, wing-scale and abdominal tergites dark brown ; antennae, labrum, legs and sternites paler. Head and body sparsely hairy.

Head-capsule subround, as long as broad without eyes ; posterior margin broadly rounded. Fontanelle : Absent.

Eyes : Black, suboval, situated on the anterior one-third and at a distance of 0.14 mm. from the lower margin of head-capsule.

Ocelli : Oval, translucent, almost touching the ocular sclerite.

Antennae : Broken, basally sparsely and distally fairly, hairy ; segment 1 cylindrical, 2 longer than half of 1 and slightly shorter than 3, 3 and 4 subequal, 4-onward segments gradually increasing in length and broadly pyriform.

Clypeus : Post-clypeus strip like, paler than frons with substraight anterior margin. Anteclypeus whitish, much broader than long.

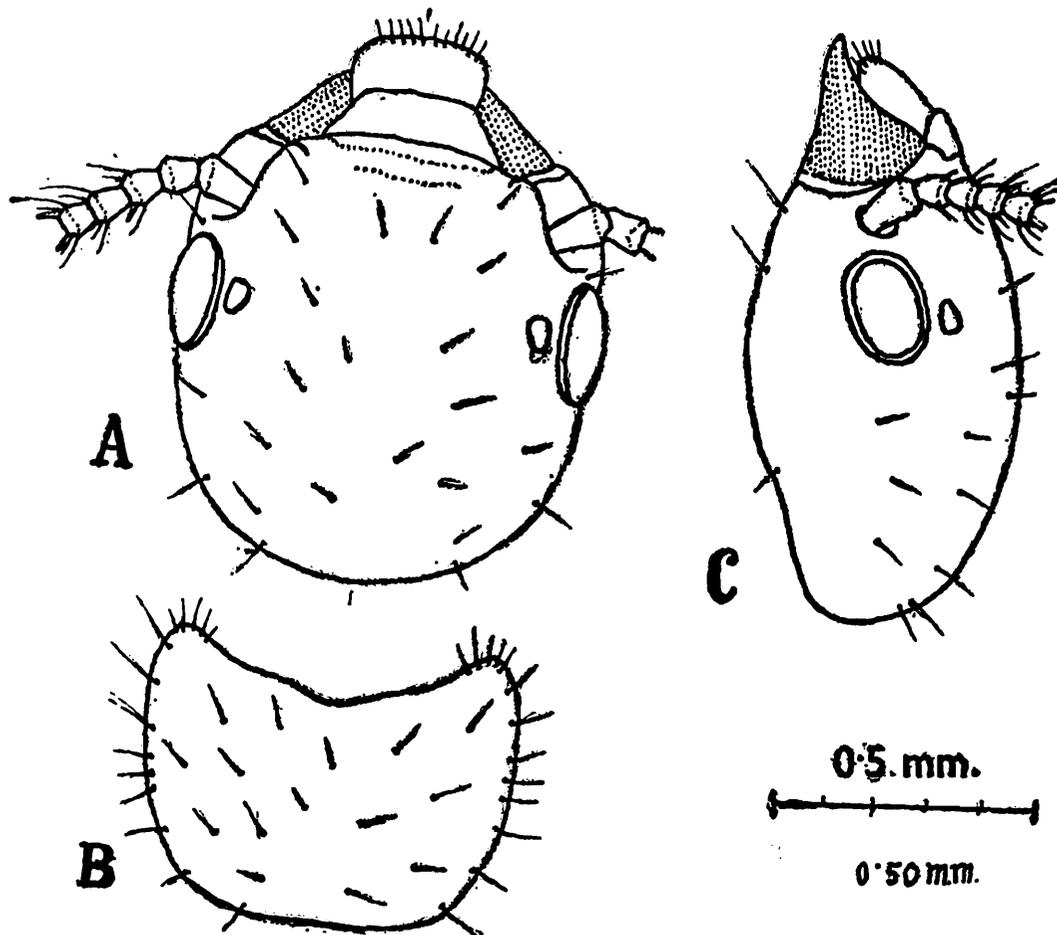


Fig. 1. *Glyptotermes krishnai*, new species. Imago (dealate). A. Head in dorsal view ; B. Pronotum, in dorsal view ; C. Head, in side view.

Labrum : Rounded and pilose apically, width more than double the length.

Mandibles : Subsquarish. Left mandible with an apical and two marginal teeth ; apical finger-like, 1st marginal shorter but thicker than apical, 2nd equal to 1st and slightly pointed with short posterior margin, margin between 1st and 2nd marginal teeth concave. Right mandible also with an apical and two marginal teeth ; apical finger-like, 1st marginal subtriangular, sub-equal to but stronger than apical, 2nd marginal short, the posterior margin a little longer than the molar plate.

Pronotum subrectangular, as broad as head-width without eyes, much broader than

long, anterior margin concave without being any median notch, posterior margin with a weak median emargination. Anterolateral corners narrowly and posterolateral corners broadly rounded ; body with a few erect hairs. Legs short and hairy, apical tibial spur formula 3 : 3 : 3, outer spur longest and inner spur smallest in all the legs. Tarsi 4-segmented, arolium present. **Wings scale** : Fore-wing scale much longer than and covering the hindwing scale. Hindwing scale shorter.

Abdomen oblong, hairy ; cerci 2-segmented. Styli (in male) 1-segmented.

SOILDER (Fig. 2, A-G ; Table 2) : Head-capsule brown, gradually becoming black ante-

TABLE—1. Measurements (in mm.) etc., of *Glyptotermes krishnai* sp. nov. and *G. nicobarensis* sp. nov.

CASTE — Imago

Body-parts		<i>G. krishnai</i> (1 Dealate)	<i>G. nicobarensis</i> (4 exs.)
1.	Total body-length with wings (excluding antennae) ..	—	6.00-6.70
2.	Total body-length without wings, (excluding antennae) ..	4.25	4.10-4.30
3.	Length of head to lateral base of mandibles ..	0.88	0.88-0.95
4.	Maximum width of head (with eyes) ..	0.84	0.84-0.92
5.	Maximum height of head ..	0.50	0.61-0.64
6.	Maximum length of post-clypeus ..	0.05	0.11-0.14
7.	Maximum width of post-clypeus ..	0.57	0.38
8.	Maximum length of labrum ..	0.26	0.23-0.26
9.	Maximum width of labrum ..	0.38	0.26-0.30
10.	Maximum diameter of compound eye (with ocular sclerite) ..	0.25	0.26
11.	Maximum diameter of lateral ocellus ..	0.07	0.07-0.08
12.	Minimum diameter of lateral ocellus ..	0.06	0.05-0.07
13.	Minimum eye-ocellus distance ..	Nil	0.02
14.	Minimum eye-antennal distance ..	0.03	0.02
15.	Maximum length of pronotum ..	0.57	0.53-0.56
16.	Maximum width of pronotum ..	0.80	0.82-0.86
17.	Length of fore-wing with scale ..	—	5.10-5.40
18.	Length of fore-wing scale ..	0.76	0.57-0.69
19.	Length of hind-wing with scale ..	—	4.60-4.80
20.	Length of hind-wing scale ..	0.61	0.19-0.23
21.	Number of antennal segments	broken	11

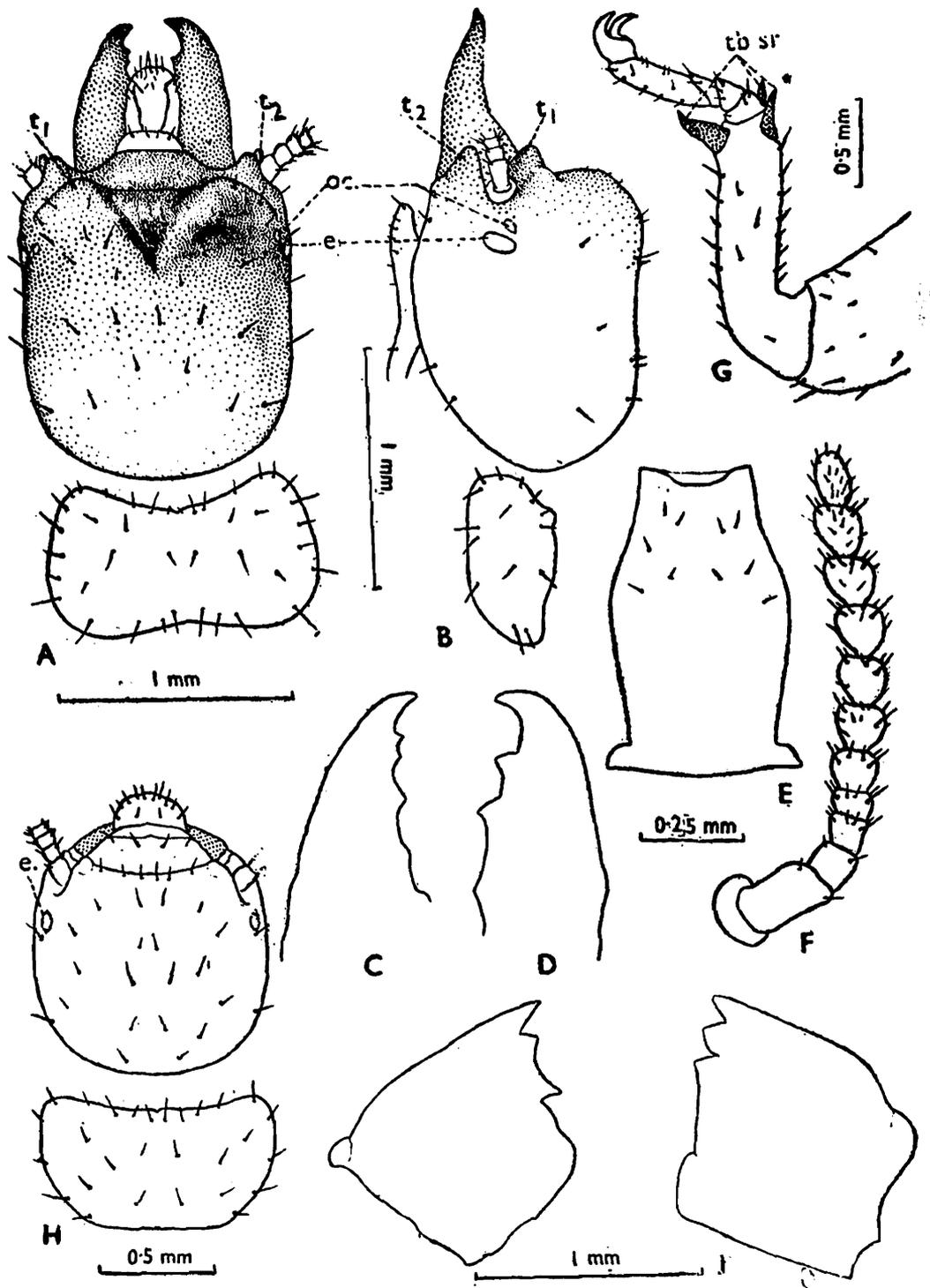


Fig. 2. *Glyptotermes krishnai* new species. Soldier and pseudoworker, A-G. Soldier A. Head and pronotum, in dorsal view; B. Same in side view (t_1 - projection on dorsal gena, t_2 horn-like projection on ventral gena, e- eye, o-ocellus); C. Left mandible; D. Right mandible; E. Postmentum; F. Antenna; G. Tibial spurs (tb. sr.) on right fore tibia. H-J. Pseudoworker. H. Head and pronotum in dorsal view; I. Left mandible; J. Right mandible.

TABLE 2—Measurements (in mm.), indices, etc. of *Glyptotermes krishnai* sp. nov. and *G. nicobarensis* sp. nov.
Caste — Soldier
G. krishnai *G. nicobarensis*

Body-parts	Range (8 exs.)	Holotype	Range (4 exs.)	Holotype
1. Body-length including mandible	5.40—6.00	5.80	5.10—6.60	5.50
2. Length of head to lateral base of mandibles	1.15—1.23	1.15	1.50—1.73	1.69
3. Maximum width of head	1.15—1.20	1.15	1.00—1.03	1.00
4. Maximum height of head	0.95—1.05	1.00	0.92—0.96	0.92
5. Head-index I (width/length)	0.97—1.00	1.00	0.59—0.66	0.59
6. Head-index II (height/width)	0.82—0.87	0.86	0.92—0.96	0.92
7. Head-index III (height/length)	0.82—0.85	0.85	0.54—0.62	0.54
8. Maximum length of labrum	0.25—0.27	0.26	0.23	0.23
9. Maximum width of labrum	0.23—0.26	0.23	0.25—0.27	0.25
10. Maximum length of mandibles (a) right mandible	0.62—0.67	0.65	0.61—0.69	
(b) left mandible	0.62—0.67	0.65	0.61—0.69	0.69
11. Head-mandibular index (left mandible length/head length)	0.53—0.54	0.56	0.35—0.41	0.41
12. Maximum diameter of eye	0.10—0.12	0.11	0.14—0.19	0.14
13. Minimum diameter of eye	0.05—0.07	0.06	0.11—0.14	0.11
14. Minimum eye-antennal distance	0.15—0.17	0.15	0.07—0.14	0.14
15. Minimum (median) length of postmentum	0.15—0.17	0.15	0.96—1.11	1.03
16. Maximum width of post-mentum	0.38—0.45	0.42	0.30—0.37	0.34
17. Minimum width of post-mentum	0.25—0.28	0.26	0.19—0.23	0.19
18. Post-mentum contraction index (min. width/max. width)	0.62—0.66	0.62	0.56—0.63	0.56
19. Maximum length of pronotum	0.67—0.75	0.67	0.53—0.61	0.57
20. Maximum width of pronotum	1.13—1.22	1.15	0.95—1.03	1.00
21. Pronotum index (length/width)	0.58—0.61	0.58	0.56—0.59	0.57
22. Head-pronotum width index (Pronotum width/head width)	0.98—1.01	1.00	0.95—1.00	1.00
23. Number of antennal segments	12	12	10—12	10

riorly ; mandibles blackish brown ; labrum dark brown ; antennae pale brown ; anteclypeus white and postclypeus black ; pronotum brown, abdomen and legs yellowish brown ; foreleg a little darker. Head and thorax moderately and abdomen fairly hairy ; each tergum with a row of hairs at posterior margin. Body-length (with mandibles, but without antennae) 5.4-6.0 mm.

Head-capsule subsquarish, slightly narrowed anteriorly, a little longer than broad ; posterior margin substraight ; lateral margins subparallel, with a little emargination just below the antennal carinae ; forehead bilobed, surface of lobes weakly rough and with a deep V-shaped depression in between lobes ; in profile, frons sharply truncated in front having median incurving ; ventral genae with a horn-like projection in between mandible-base and below antennal socket ; a prominent tubercle on top of each of the antennal sockets ; head-dorsum with a very weak median depression. Y-suture absent.

Eyes : Suboval, white, spot-like placed a little below the antennal socket, eye-antennal distance 0.15-0.17 mm.

Ocelli : Oval and prominent.

Antennae : With 11-12 segments ; segments 1 and 2 sparsely, and the rest moderately pilose ; segment 1 stout, longest, 2 much smaller than 1, 3 slightly smaller than 2, 3 and 4 subequal ; in some specimens 3 smallest (in 11 segmented antennae) in others 4 smallest (in 12 segmented antennae) ; 5-10 subequal and conical last one small.

Clypeus : Postclypeus strongly chitinized, broader than long, anterior margin substraight ; posterior margin not clearly demarcated from frons ; lateral margins raised a little to form a shallow median depression. Anteclypeus white, strip-like, sloping down-

wards ; much broader than long and weakly narrowing in front ; anterior margin weakly convex, provided with a few long hairs.

Labrum : Longer than broad, reaching much above half of the mandibles ; anterior margin sub-rounded ; lateral margins weakly convex ; a few hairs on the body.

Mandibles : Small, stout and with a weak basal hump on outer margin ; almost half the length of head to lateral base of mandible. Left mandible with three marginal teeth ; 1st and 2nd small and close to each other, with concave margin in between ; 3rd comparatively long and placed moderately below the 2nd. Right mandible with two stout marginal teeth ; 1st placed much below the apical tip (distance from tip, ca. 0.18-0.19 mm. ; 2nd stouter than 1st.).

Postmentum : Longer than broad, sparsely pilose anteriorly ; maximum width at the anterior one-third, whence the lateral margin narrowing both anteriorly and posteriorly ; anterior margin concave ; posterior margin weakly convex.

Pronotum : Almost as broad as head, with a few long and short hairs ; anterior margin broadly and deeply concave ; posterior margin fairly deeply emarginated ; anterolateral angles narrowly and posterolateral angles broadly rounded.

Legs : Short and stout ; foreleg a little stouter ; sparsely hairy ; apical tibial spur formula 3 : 3 : 3 ; foretibia with a thick conspicuous spur on outer side near the tip, much thicker and larger than other two apical spurs (Text-fig. 2, G) in the same tibia. Tarsi 4-segmented.

Abdomen elongate ; both tergites and sternites sparsely hairy. Cerci 2-segmented. Styli 1-segmented.

PSEUDOWORKER (Fig. 2, H, I) : Head-capsule and antennae white ; labrum, post-clypeus, pronotum, legs and abdomen brownish white. Head, thorax and abdomen fairly pilose. Body-length without antennae 4.50-5.65 mm.

Head-capsule subcircular ; almost as long as broad ; lateral margins weakly convex ; posterior margin rounded. Eyes suboval, fairly large, white. Ocelli absent. Antennae with 12 segments, sparsely hairy ; segment 1 stout and longest, 2 much smaller than 1, 3 subequal to 2, 4 smallest, 5-11 conical, broader than long, last (12) ovate and small. Post-clypeus strongly chitinized, pilose. Labrum a little broader than long ; anterior margin substraight : lateral margins weakly convex ; with a few short hairs on body. Mandibles of typical *Glyptotermes*-type. Left mandible with an apical and two marginal teeth ; apical finger-like, 1st marginal small and close to apical, 2nd equal to 1st and widely separated from it, margin between 1st and 2nd without having any notch. Right mandible with an apical and two marginal teeth ; apical finger-like ; 1st blunt, equal and close to apical ; 2nd smaller and close to 1st, with a long posterior margin.

Pronotum broader than long, slightly narrower than head-width ; anterior margin broadly concave, posterior margin with a weak median emargination ; anterolateral corners narrowly and posterolateral corners broadly rounded ; long and short hairs on all margins. Legs short and pilose. Tibial spur formula 3 : 3 : 3. Tarsi 4-segmented.

Abdomen elongate and pilose. Cerci 2-segmented. Styli 1-segmented.

Measurements (in mm.) of pseudoworker (range of ten examples) : Length of head to tip of labrum 1.20-1.27 ; length of head to lateral base of mandibles 0.92-1.00 ; max.

width of head 1.00-1.11 ; max. height of head 0.65-0.75 ; max. width of labrum 0.29-0.37 ; max. length of labrum 0.15-0.24 ; max. length of pronotum 0.60-0.69 ; max. width of pronotum 0.90-1.03.

Type-specimens : All specimen in spirit from a single source (vide "Material" above) deposited in separate vials, as follows :—

Holotype : Soldier (Z. S. I. Reg. No. 2528/H₁₁) from material above, in Z. S. I., Calcutta. Morphotype : 1 dealate and 2 pseudoworkers (Z. S. I. Reg. No. 2529/H₁₁) from holotype-lot, in Z. S. I., Calcutta. *Paratype* soldiers and *paramorphotype* pseudoworkers : (i) 9 soldiers and 5 pseudoworkers, (Z. S. I. Reg. No. 2530/H₄₁) in Z. S. I., Calcutta ; (ii) 1 soldier and pseudoworker, in Forest Research Institute, Dehra Dun, U. P. ; and (iii) 1 soldier and 1 pseudoworker in American Museum of Natural History, New York.

Type-locality etc. : Champa Bay, Great Nicobar Island. Known only from the type-locality.

Comparison : The soldier of *Glyptotermes krishani* sp. nov. can easily be separated from all the other species of the genus in having a large, thick, outer apical tibial spur on the foreleg, and it is much larger than the other two apical spurs and in having very prominent tubercles on frons, one on either side, a little above antennal sockets.

Remarks : On primary examination, this species appears to belong to the genus *Calcaritermes*, because of the presence of a large, thick outer spur near the tip of front tibia of soldier. Dr. Kumar Krishna of American Museum of Natural History, New York, kindly examined the specimens of this species. He, in personal communication, mentioned "On the basis of the tibial spur, the soldier belongs to the

genus *Calcaritermes*. However, in all the *Calcaritermes* in our collection which have the prominent front tibial spur, two of the three tibial spurs in the middle and hind tibiae are darker in colour and shorter than the third tibial spur in the same leg. I do not find this characteristic in the soldier which you gave me. Also your soldier has a prominent tubercle on top of the antennal socket, and this prominent tubercle is not found in any of the other *Calcaritermes* species. However, it is found in some *Glyptotermes*. In addition, if this species is placed in *Calcaritermes*, the distribution of the genus will be anomalous. The genus *Speculitermes* which was presumed to have such an anomalous distribution (Neotropical, Indomalayan), is now proving to be two separate genera. A tibial spur like the one found in your specimen, which is like that of *Calcaritermes* could have developed independently in *Glyptotermes*. I myself would be very hesitant to put it in the genus *Calcaritermes*. I would put in *Glyptotermes*, explaining that this character could have developed independently, though of course this will be difficult to prove. I have discussed this problem with Dr. Emerson, and he agrees with me." Basing on Dr. Krishna's opinion, the species has been placed in the genus *Glyptotermes*.

2. *Glyptotermes nicobarensis*, new species

Material : (i) One vial with 2 soldiers, sev. pseudoworkers, 8 imagos and sev. imago-nymphs from Laksman Beach, Campbell Bay, Great Nicobar ; Stn. No. 11, F. C. No. 2, P. K. Maiti and party coll., 28.xii.1975, ex. "decaying fallen log lying on ground." (ii) One vial with 2 soldiers, sev. pseudoworkers, 2 imagos and imago-nymphs from Rajendra nagar, 35 km. from Campbell Bay, Great Nicobar, B. Nandi and party coll., 6.xii.1978, ex. "fallen log".

Description :

1. IMAGO (Figs. 3 and 4, Table 1) :

Head, thorax and tergites chestnut brown ; labrum, antennae, legs and sternites paler ; mandibles brown with dark brown toothed margins. Head and thorax sparsely and abdomen fairly densely hairy. Total body-length with wings 6.00-6.70 mm. without wings 4.10-4.30 mm.

Head-capsule as long as broad or slightly broader than long ; sides without eyes substraight, strongly rounded at the posterolateral corners ; posterior margin round.

Fontanelle : Absent.

Eyes : Medium sized, subcircular, separated from lower margin of head by less than half its diameter.

Ocelli : Oval, translucent, only slightly separated from the eye on its side.

Antennae : With 11 segments ; sparsely pilose ; segment 1 longest, cylindrical, 2 shorter than 3, 3 almost equal to 2 and 4 combined, 5 to the penultimate segments pyriform and gradually increasing in size ; the last one ovate, shorter than the others.

Clypeus : Subtrapezoid, Anteclypeus hyaline, strip-like, apilose. Postclypeus depressed and brown with few hairs.

Labrum : Slightly broader than long, anterior margin subround with a few hairs on its body.

Mandibles : Subsquarish. Left mandible with an apical and 2 marginal teeth ; apical finger-like ; 1st marginal shorter than apical ; posterior margin of 1st marginal tooth subequal to anterior margin of 2nd marginal

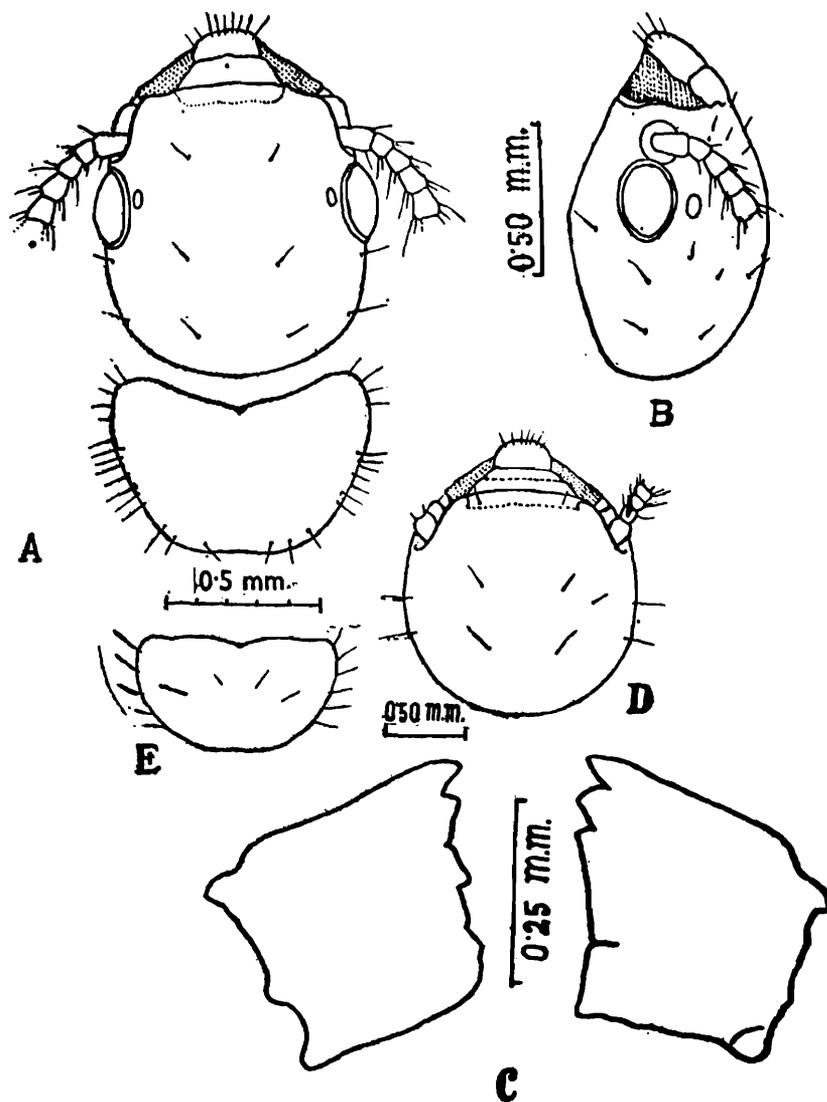


Fig. 3. *Glyptotermes nicobarensis*, new species. Imago and pseudoworker. A-C. Imago. A. Head and pronotum in dorsal view ; B. Same in side view ; C. Mandible of Imago. D-E. Pseudoworker. D. Head in dorsal view ; E. Pronotum in dorsal view.

tooth with a notch in between, 2nd equal to 1st. Right mandible also with an apical and 2 marginal teeth ; apical finger-like, 1st marginal triangular and broad. Posterior margin of 2nd very much long.

Pronotum : Slightly narrower than or as wide as width of head with eyes, much broader than long ; anterior margin deeply concave without a median notch ; anterolateral corners narrowly and posterolateral corners broadly, rounded ; posterior margin

weakly convex, without distinct median emargination.

Legs : Short, stout and pilose ; tibial spur formula 3 : 3 : 3, Tarsi 4-segmented. Arolium present.

Wings : Darkbrown membranous, covered with prominent scales.

Fore wings : A little longer than hind wing ; scale also longer and covering the

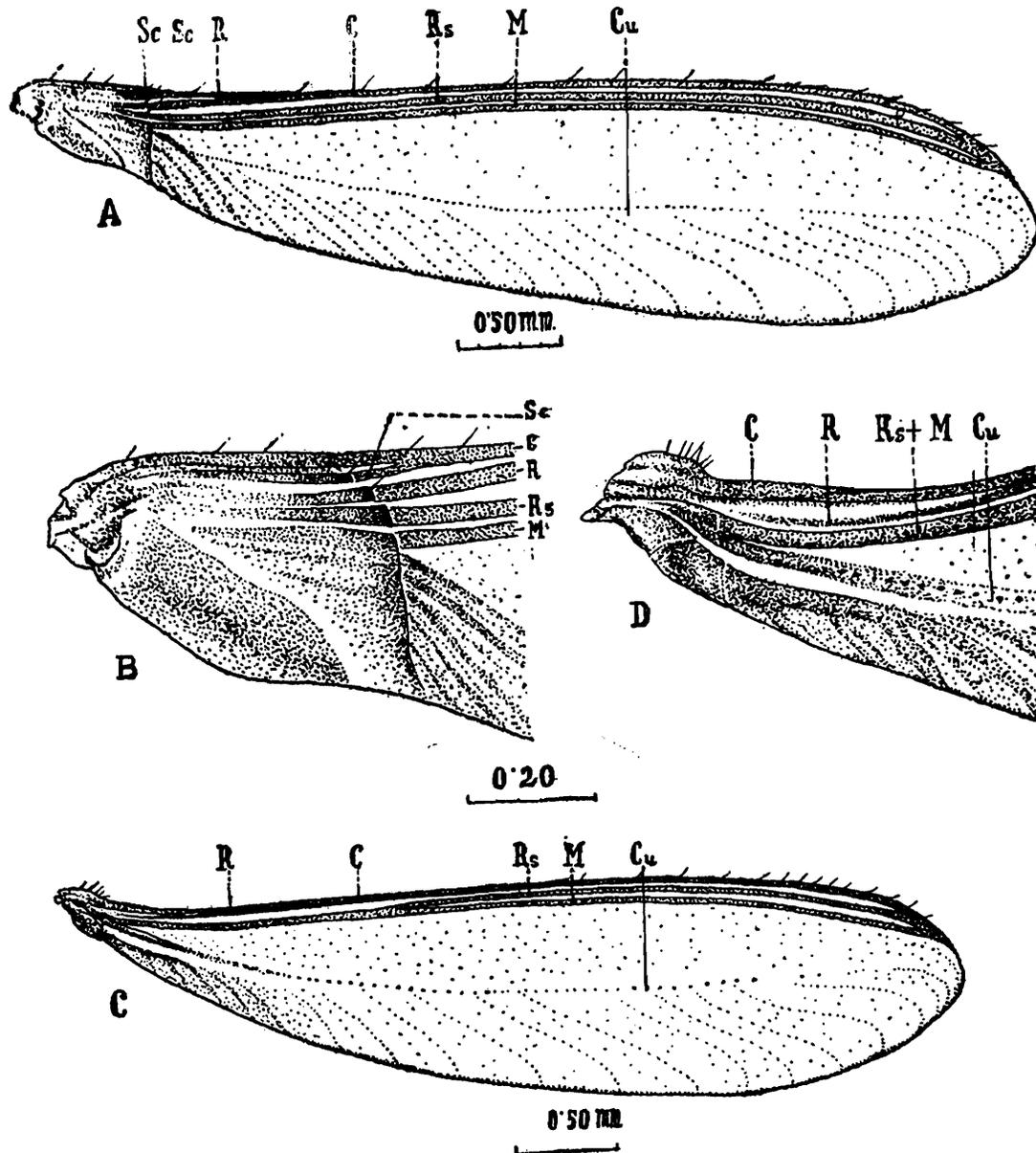


Fig. 4. *Glyptotermes nicobarenensis*, new species. Wings. A. Forewing in dorsal view. B. Same, proximal portion enlarged. C. Hindwing in dorsal view. D. Same, proximal portion enlarged. C., costa; Cu-, cubitus; M., median; R., radius; Rs., radial sector; Sc., subcosta.

hind wing scale. Costa, subcosta, radius, radial-sector and median strongly chitinised and thick; cubitus generally weak but strong at its origin. Costa bordering the anterior margin and running upto distal end. Subcosta minute, fused with the costa a little outside the scale. Radius short, arising independently and fusing with the costa at the anterior one-sixth of the wing. Radial sector originating from the same stalk of

radius inside the scale but arising separately from scale and running almost parallel with costa upto the distal end. Radial sector without any branches or cross veins. Median also a little curving up and running close to and parallel with radial sector. Cubitus running medially and with 11-12 branches to posterior margin; cross veins between cubitus and median absent.

Hindwing: Costa, radius and radial-sector

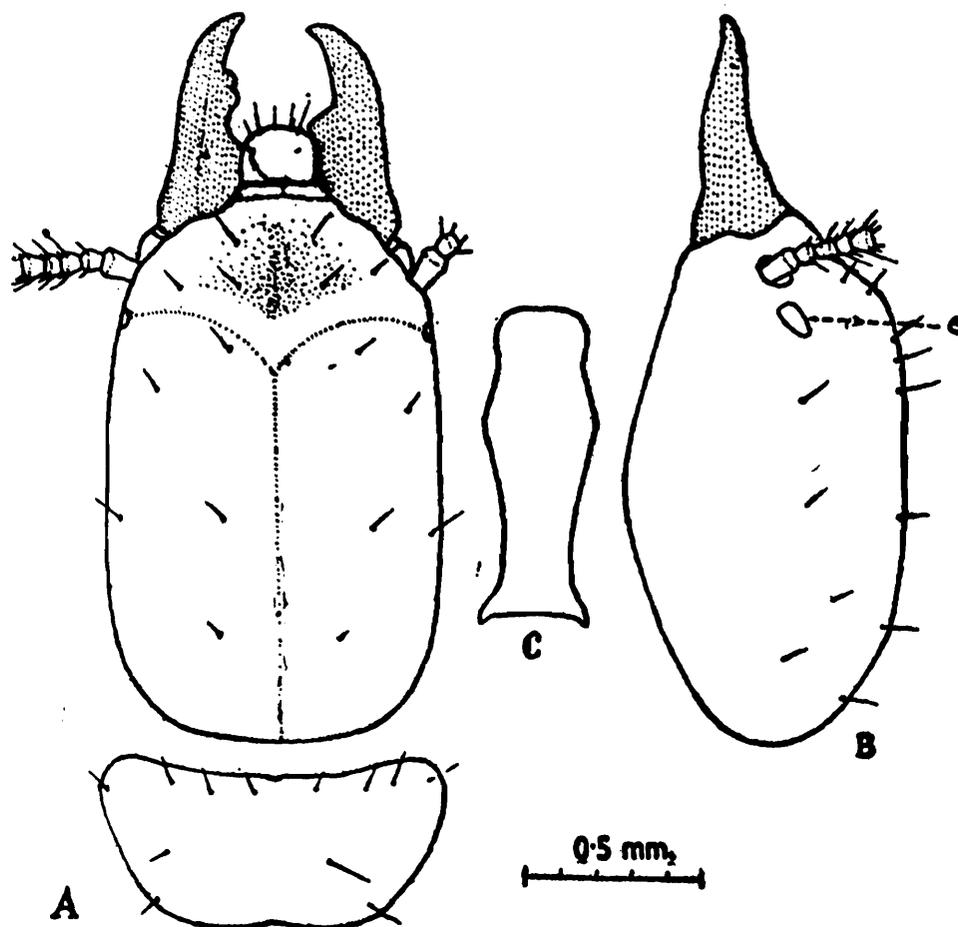


Fig. 5. *Glyptotermes nicobarensis*, new specie. Soldier. A. Head and pronotum in dorsal view ; B. Same in side view ; C. Postmentum.

as in fore-wing. Subcosta absent. Median arising from the radial-sector at about anterior one-third of wing membrane from the scale, and running close to and parallel with the radial sector upto the distal end. Cubitus as in forewing, with 12-13 branches to posterior margin ; cross veins between cubitus and median absent.

Abdomen-oblong ; sparsely hairy ; cerci 2-segmented with long hairs ; styli (in males) 1-segmented.

SOLDIER (Fig. 5, Table 2) :

Head-capsule reddish brown, paler posteriorly ; antennae, labrum, legs and abdomen pale yellowish brown ; mandibles black

apically. Head and body sparsely pilose, Body-length 5.10-6.60 mm.

Head-capsule subrectangular : about more than one and a half times as long as broad ; anterolateral corners not prominent ; lateral margin substraight ; posterolateral corners broadly rounded ; frons smooth and weakly depressed medially and inclined at an angle of 45° ; Y-suture feeble.

Eyes : Subround, whitish ; eye-antennal distance less than maximum diameter of eye.

Ocelli : Absent.

Antennae : With 10-12 segments ; all segments except 1 and 2, fairly pilose ; seg-

ment 1 large and cylindrical, 2 smaller than 1 and a little larger than 3, the latter smallest and thinnest, 4 longer than 3, remaining segments except the last one broad anteriorly and narrow posteriorly, the last one narrower.

Clypeus : Postclypeus depressed dorsally and pilose anteriorly. Anteclypeus a translucent narrow strip and apilose. Labrum slightly broader than long, pilose near tip, subround anteriorly and lateral margin substraight.

Mandibles : Short, more than one-third as long as head-capsule, moderately hooked apically. Left mandible with 3 marginal teeth ; 1st weakly pointed upwards, 2nd blunt and close to 1st, 3rd minute and pointed, placed much below the 2nd, inner margin between 2nd and 3rd widely concave. Right mandible with two marginal teeth ; 1st marginal placed almost at the middle with long anterior margin, 2nd smaller than 1st and placed a little below the 1st.

Postmentum : Club-shaped, anterior two-third portion broad and posterior one-third narrow, anterior portion slightly less than double the minimum width, both anterior and posterior margin substraight.

Pronotum : Flat, as wide as head, length more than half the width, anterior margin broadly concave, lateral and posterior margin weakly convex, latter with a weak median emargination.

Legs : Short, slender and pilose. Tibial spur formula 3 : 3 : 3. Tarsi 4-segmented.

Abdomen elongate and cylindrical, sparsely hairy. Cerci 2-segmented, short and hairy. Styli 1-segmented.

Body creamy white and elongated. Head capsule straw yellow ; antennae, thorax, leg and abdomen paler. Mandibles yellowish with dark brown tooth margin. Head and body sparsely hairy. Head : Head-capsule sub circular, as long as wide, side convex, posterior margin rounded. Fontanelle and Ocelli absent. Eyes : Subround, same colour as that of head. Antennae : With 9 segments, 2 longer than 3, 3 longer than 4, remaining gradually increasing in size. Clypeus : Indistinctly divided into an ante- and a post-clypeus with a few hairs near posterior margin. Labrum : Broadly tongue shaped broader than long ; with a few hairs near anterior margin and on body ; anterior margin subround. Mandibles : Like that of imago.

Pronotum : Wider than long with shallowly concave anterior margin, lateral sides converging posteriorly. Legs ; Short and stout ; apical tibial spurs 3 on each leg. Tarsi 4-segmented.

Abdomen oblong, sparsely hairy. Cerci 2-segmented. Styli 1-segmented.

Measurements (in mm.) of pseudoworker (range five examples) : Length of head to tip of labrum 0.94-1.14 ; length of head to lateral base of mandibles 0.76-1.00 ; max. width of head 0.78-1.00 ; max. height of head 0.61 ; max. width of labrum 0.26-0.30 ; max. length of labrum 0.16-0.23 ; max. length of pronotum 0.38-0.57 ; max. width of pronotum 0.65-0.88.

Type-specimens : Specimens in spirit, deposited in separate vials, as follows :—

Holotype : Soldier (Z. S. I. Reg. No. 2531/H₁ 1) from "Material (i)" above, in Z.S.I., Calcutta.

PSEUDOWORKER (Fig. 3, D, E) :

Morphotype : 1 Imago and 2 pseudo-

workers (Z. S. I. Reg. No. 2532/H₁₁) from holotype lot, in Z. S. I., Calcutta, paratype soldiers and Paramorphotype imagos : (i) 3 soldiers and 6 imagos and 5 pseudoworkers (Z. S. I. Reg. No. 2533/H₁₁) in Z. S. I., Calcutta. (ii) 1 imago in Forest Research Institute, Dehra Dun, U. P. (iii) 1 imago in American Museum of Natural History, New York, U. S. A.

Type-locality, etc. : Laksman beach, Campbell Bay, Rajendranagar, Great Nicobar Island. Known only from the type-locality.

Comparison : *G. nicobarensis* is very close to *G. almorensis* Gardner from Almora, U. P. and *G. minutus* Kemner, from Ceylon, but differs from them as follows :—

From *G. almorensis* :

Imago : (i) Antennae with 11 segments, 2nd shorter than 3rd (vs. antennae with 12 segments, 2nd longer than 3rd). (ii) Anterior margin of pronotum deeply concave, anterolateral corners narrowly and posterolateral corners broadly rounded, lateral margins strongly converging posteriorly (vs. weakly concave and both the antero- and postero-lateral corners broadly rounded, lateral margins almost parallel sided).

Soldier : (i) Mandible shorter, weakly hooked, more than one-third as long as head-capsule ; 1st and 2nd marginal teeth of left mandible blunt and very closely placed, 3rd widely separated from 2nd with strong concavity in between (vs. mandibles comparatively longer, strongly hooked, a little less than half the head-capsule ; 2nd and 3rd marginal teeth moderately pointed and not so closely placed, 3rd comparatively closely placed with weak concavity in between). (ii) Head index (Height/Width) 0.92-0.96 (vs. 0.80-0.87). (iii) Postmentum narrower 0.30-0.37 mm. contraction index 0.56-0.63, lateral

margins anterior to maximum width incurved (vs. wider 0.40-0.43, contraction index 0.47-0.57 lateral margins almost straight.).

From *G. minutus* :

Imago : (i) Head thicker, 0.61-0.64 mm. (vs. thinner 0.47 mm.). (ii) 2nd antennal segment shorter than 3rd (vs. 2nd equal to 3rd). (iii) Ocelli slightly separated from the eye (vs. ocelli almost touching the eyes). (iv) Pronotum narrower than or as wide as head-width with eyes, anterior margin deeply concave, lateral margins strongly converging posteriorly (vs. pronotum much narrower, anterior margin shallowly concave, lateral margins almost parallel sided).

Soldier : (i) Head wider 1.00-1.03 (vs. narrower 0.74-0.92). (ii) Postmentum widest at the anterior one-third, lateral margins anterior to the maximum width incurved (vs. widest at the anterior one-fourth, lateral margins almost straight). (iii) Lateral margins of the pronotum converging posteriorly (vs. almost parallel sided).

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