

SOME DATA TO THE TERMITE FAUNA OF EGYPT

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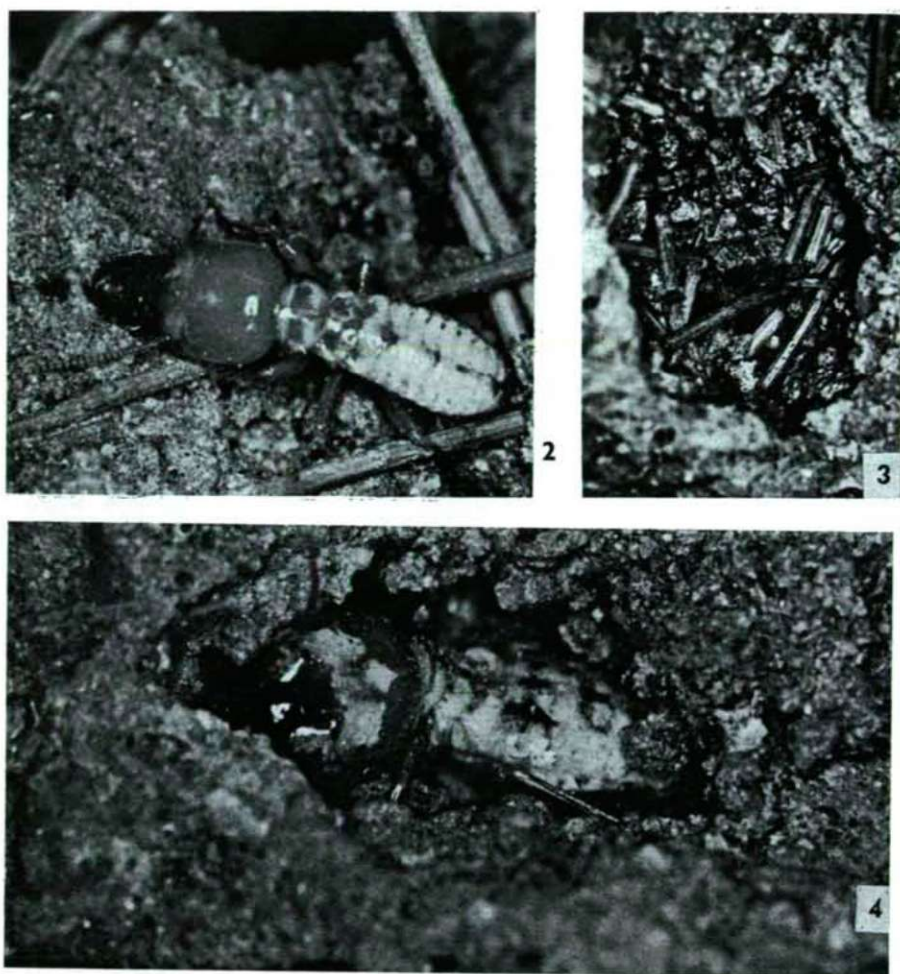
Abstract

Author discusses two rare species of termites from Egypt: *Amitermes desertorum* DESNEUX and *Psammotermes hybostoma* DESNEUX. The two species have been found in new localities at Abu-Rawash and Wadi Assiuti (Badari), respectively. Nesting conditions given.

The termite fauna of Egypt has been recently treated by LAILA S. EL-SHERIF and A. H. KASCHEF (1974), and by A. KASSAB, A. M. CHAARAWI, M. I. HASSAN and A. M. SHAHWAN (1960). KASSAB et al. (1960) have shown 8 termite species to occur in Egypt, of which one proved to be a new species belonging into the family of Psammotermitidae. They also discussed the question of protection against them with due reference to the distribution of the individual species. EL-SHERIF and KASCHEF (1974) have shown a species new to the fauna of Egypt: *Microcerotermes eugnatus* SILV. (Termitidae) and discussed in detail complemented with a key the following species: *Anacanthotermes ochraceus* BURM., *Amitermes desertorum* DESN.



Fig 1



Figs. 1—4. *Acanthotermes ochraceus* BURM. 1=worker, 2=soldier, 3=vegetal detritus serving as food in a chamber, 4=secondary queen (Original)

and *Psammotermes hybostoma* DESN. Unfortunately, the place of occurrence of only the third species is mentioned.

Acanthotermes ochraceus BURM. Specimens: worker (Fig. 1), soldier (Fig. 2), secondary queen (Fig. 4). They were cultured in a nest with a size of a fist in the laboratory of Dr. ALI HASSANAIN EL-HEMAESY (Ministry of Agriculture, Dokki, Plant Protection Research Institute, Termites Research Division). Multiplication was effected by a secondary queen. In one small chamber vegetal detritus with an average size of 4—5 mm was accumulated supplying food (Fig. 3).

Amitermes desertorum DESN. KASSAB et al. (1960) say that the species had been found shortly before the publication of their paper by Prof. H. PRIESNER in Egypt,

though locality was not mentioned. On the 21st of November, 1975 the nest was found at Guizeh: Abu-Rawash district, where, according to the local people the termites, some 20 years ago, destroyed several houses. KASSAB et al. made reference to *Acanthotermes ochraceus* BURM. living in the environs of Abu-Rawash. The probability of misidentification is excluded owing to significant difference in size between the two species.

On the surface of the earth among the date palms there is no sign of termites. The communication tunnels of termites were found in the light yellow sand among tussocks of grass at the upper edge of a five metre wide canal bank. The above-ground part of the termitary is ovoid in shape, dark in colour with a height varying between 25 and 30 cm (Fig. 5). The building of the termites clearly separated from the yellow sand by its dark colour. As the side of the building was carefully scraped away we observed irregularly running channels with very smooth walls of 1 cm in diameter. The channels were full of workers (Fig. 6) admixed with soldiers bearing large jaws, alate caste, apterous nymphs, and with numerous short-winged and long-winged nymphs and males (Fig. 7). In several chambers small piles of sand were accumulated on which workers were sitting. In the central part of the building there was a flat, a not quite horizontal chamber, c. 4 cm in length, appearing to be a cradle, though there was no queen to be seen, nor were the exit holes bigger than the rest. Since I have entirely demolished the castle I may safely say that there has not been a queen with a swollen abdomen. Thus, the multiplication of the nest is secured through secondary queen(s). It was very likely that the present nest was only auxiliary in function besides a distant larger nest. Unfortunately, there was no time to follow up the communicating channels in order to find the central colony.

Herewith I feel it my pleasant duty to thank Dr. MOHAMED ALI (Faculty of Agriculture, Al-Azhar University, Cairo) who made it possible for me to discover the termite nest.



Fig 5

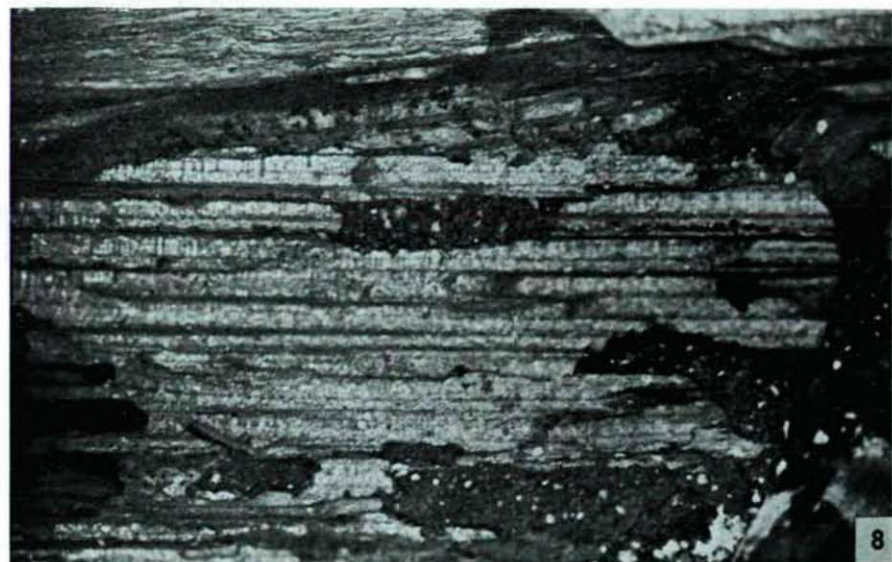


Figs. 5—7. *Amitermes desertorum* DESN. 5= cross-section of nest taken out of sand, 6= part of a tunnel in the nest with larvae, workers, long-winged nymphs, 7= long-winged and apterous nymphs, workers and winged males (Original)

Psammotermes hybostoma DESN. This species was first reported to occur in Egypt by LAILA S. EL-SHERIF and A. H. KASCHEF (1974), in the following localities: Fayoum, Asswan, Dakhla and Kharga Oases. I found this species on the 26th of November, 1975 at Wadi Assiuti, Arab Motier, Badari, 43 km from Ass-iut. The school was situated in a barren area close to some bare mountains 2—3 km off from the village built among date palm groves. There were scarcely any termites in the disintegrated wooden parts of the building, though under the thin superficial layer, when taken off, the channels and the mud communication tubes were well perceptible (Fig. 8). Among the workers (Fig. 10) small soldiers, just as well as medium- and large

sized soldiers (Fig. 9) have been seen. There were no alate caste forms and large-bodied queens, since we had no time to take the wooden parts of the house into pieces. The dry stem of plants fetched in by the villagers, where these were cut in halves were covered with mud of 3—4 cm in thickness, breaking them up large numbers of termites, mainly workers and nymphs were swarming about (Fig. 11). The inside of uncut stems was also full with termite channels.

The description of each developmental stage given originally by LAILA S. EL-SHERIF and A. H. KASCHEF (1974) well agreed with field observations.



Figs. 8—10



Figs. 8—11. *Psammotermes hybostoma* DESN. 8=mud-tubes in door-post, 9=soldier, 10=worker, 11=nymphs and soldiers hiding under mud cover in nest (below) (Original)

References

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