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Biomphalaria alexandrina from a Neolithic site in Wadi
Gibba, Sinai

A Wadi Gibba (Sinai) meolitikus rétegeből előkerült

Biomphalaria alexandrina

ABSTRACT: A single shell of Biomphalaria alexandrina is reported from the Neolithic site Gibba II, in Wadi Gibba, Sinai. This is the first record of a member of the Planorbidae from the Sinai peninsula. Its presence at the site is discussed.

The excavation of the Neolithic site of Gibba II in Wadi Gibba, Plateau HaQa, Sinai, Egypt, by Prof. O. BAR-YOSEF, yielded among others a number of molluscs. The marine species are currently being studied by Mrs. D. BAR-YOSEF. A single shell of a freshwater species was submitted for identification to the author. It turned out to belong to Biomphalaria alexandrina (Ehrenberg, 1831) (Fam. Planorbidae).

This intermediate host of Schistosoma mansoni is known from Egypt (DAZO et al., 1966; DAWOOD & CHU, 1973; MALLETT & ABOUL-ELA, 1979; BROWN, 1980; SATTMAN & KINZELBACH, 1988) and Sudan (WILLIAMS & HUNTER, 1968; MANDAHN-BARTH, 1973; BROWN, 1980). Once it was also living in Israel (WITENBERG & SALITERNIK, 1957), but there it is now extinct due to pollution (MIENIS, 1986) Biomphalaria alexandrina nor any other member of the

Planorbidae has ever been reported from the Sinai peninsula (PALLARY, 1924; TCHERNOV, 1971; VAN DAMME, 1984).

The question may be asked: What is Biomphalaria alexandrina doing at the Neolithic site in Wadi Gibba? Was the environmental situation during the Neolithic so different from today that Biomphalaria was able to live somewhere in the neighbourhood? This brings to mind the unexpected find of a fossil freshwater fauna with Oxyloma, Galba and Pisidium in Wadi Firan, also in western Sinai. That fauna is, however, of much older age.

Is it possible that Biomphalaria reached the site by means of transport of freshwater from the Nile-region to western Sinai?

It is certainly not a species which was collected on purpose or received in exchange by the inhabitants of the site. The shell is unsuitable for making beads or pendants out of it, nor is it edible.

Only more finds of Biomphalaria alexandrina in the Sinai peninsula may shed some more light on this interesting problem.

REFERENCES

- BROWN, D.S. (1980) Freshwater snails of Africa and their medical importance. 487 pp. Taylor & Francis Ltd., London. DAMME, D. van (1984) The freshwater mollusca of Northern Africa. 164 pp. Dr. W. Junk Publ., Dordrecht-Boston-Lancaster. DAWOOD, I.K. & CHU, K.Y. (1973) Susceptibility of Biomphalaria alexandrina to infection with S. mansoni in Egypt. J. Trop. Med. Hyg., 76: 48-50. DAZO, B.C., HAIRSTON, N.G. & DAWOOD,

I.K. (1966) The ecology of Bulinus truncatus and Biomphalaria alexandrina and its implication for the control of bilharziasis in the Egypt-49 project area. Bull. Wld. Hlth. Org., 35: 339-356. MALLET, J.C. & ABOUL-ELA, I.A. (1979) A new range extension of Biomphalaria alexandrina, the snail intermediate host of Schistosoma mansoni in Egypt. Malac. Rev., 12: 91-92. MANDAHL-BARTH, G. (1973) A field guide to African freshwater snails, part 3 North East African species. Danish Bilharziasis Laboratory, Charlottenlund. MIENIS, H.K. (1986) A revised checklist of the brackish- and freshwater molluscs from Israel and the administered areas. Levantina, 63: 675-682. PALLARY, P. (1924) Faune malacologique du Sinai. J. Conch., 68: 181-217. SATTMANN, H. & KINZELBACH, R. (1988) Notes on inland water molluscs from Egypt (Mollusca: Gastropoda, Bivalvia). Zool. Middle East, 2: 72-78. TCHERNOV, E. (1971) Freshwater molluscs of the Sinai peninsula. Israel J. Zool., 20: 209-221. WILLIAMS, S.N., HUNTER, P.J. (1968) The distribution of Bulinus and Biomphalaria in Khartoum and Blue Nile provinces, Sudan. Bull. Wld. Hlth. Org., 39: 848-954. WITENBERG, G. & SALITERNIK, Z. (1957) Studies on vectors of Schistosoma in Israel. Bull. Res. Council. Israel, 6B: 108-141.

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