On Bankia fimbriatula Moll & Roch in driftwood washed ashore on the Dutch Coast

by
W. S. S. VAN BENTHEM JUTTING
(Zoological Museum, Amsterdam)

Some years ago, on August 20, 1948, Mr. J. STOCK, student of biology of the Amsterdam University found an enormous piece of driftwood on the beach between IJmuiden and Zandvoort. This log was severely infested by a shipworm. Mr. STOCK took a large part of it home and, after drying it, he managed to produce from it several shells and pallets of a shipworm he had never seen before. He presented them to the Zoological Museum of Amsterdam, where I could identify the calcareous elements as Bankia fimbriatula Moll & Roch, an identification which was afterwards confirmed by Miss RUTH TURNER (Museum of Comparative Zoology, Cambridge Mass.).

At my request Mr. A. T. J. BIANCHI, retired forest officer of the Netherlands Indian Government and now specialist of tropical woods of the Royal Institute for the Tropics in Amsterdam, kindly inspected the log. It was of a beautiful red-brown colour, with satin lustre in transverse section. In Mr. BIANCHI's opinion it is probably Mahogany (Meliaceae).

From the outside only pinpoint small holes were visible which, below the surface soon widened to tubes of 3 to 4 mm diameter. The interior walls of the tubes were not lined with calcareous matter. All tubes were arranged a gainst the grain of the wood-fibres. This seems rather extraordinary for a shipworm as these animals generally bore with the grain, although much seems to depend upon the condition of the wood. Moreover it is very common under crowded conditions for any shipworm to bore a cross the grain of the wood.

In addition to the species of *Bankia* the log had two colonies of the Polyzoan, *Schizoporella unicornis* (Johnst.) and a couple of specimens of *Heteranomia squamula* (L.) on it.

The shell of *Bankia fimbriatula* is of the usual *Teredo*-type and not very characteristic. The pallets, however, are most peculiar and quite unlike those of a *Teredo*. The blades are composed of several compressed cup-shaped or cone-shaped parts stacked up like a pile of dishes and tapering to the distal end. Together these segments look like a miniature head of wheat. The upper margin of each

cone is finely serrate, the serrations being shallow on the outside of the pallet, but more comb-like on the posterior wall. On the lateral sides the segments produce long serrated awns.

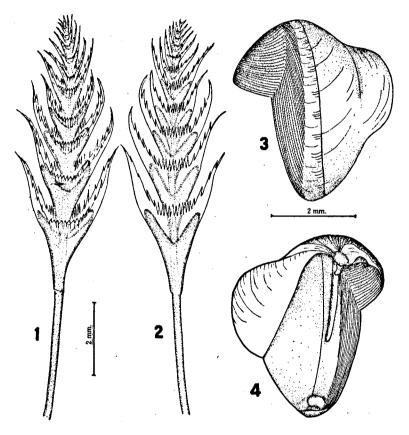


Fig. 1-4. Bankia fimbriatula Moll & Roch, Port au Prince, Haiti. 1. Outer surface of pallet. 2. Inner surface of same pallet. 3. External view of shell. 4. Internal view of same shell. (By the courtesy of CLENCH & TURNER the original figure of their publication in Johnsonia, no. 19, 1946, was put at the disposal of Basteria for reproduction in this volume.)

The blades of the pallets vary between $3\frac{1}{2}$ and 6 mm in length, the stalks between 4 and 7 mm in length. There are between 6—13 segments in a blade.

length of blade	length of stalk	width of blade	no. of segments
6 mm	6 mm	1,75 mm	10
5	7 ·	1,25	. 11
$3\frac{1}{2}$	5	1	10
3 <u>‡</u>	$4\frac{1}{2}$	1	10
5	5	1,25	6
4	4	1,25	10
5	6	1,25	. 11
5	5	1,25	10
$3\frac{1}{2}$	5	1	. 9
5	7	1,50	10
5	7	1,50	10
4 ·	5	1,25	· 8
4	4	1,25	10
4	5	1	8
$4\frac{1}{2}$	$5\frac{1}{2}$	1,25	13

Bankia fimbriatula occurs in the Atlantic Ocean, on the east and west coasts of Florida, the West Indies and south to Bahiá, Brasil. It is also reported from the Eastern Pacific at Panama (CLENCH & TURNER, 1946. The genus Bankia in the Western Atlantic. Johnsonia, Vol. 2, no. 19, p. 22—24, pl. 14 fig. 1—4).

In Europe it has been recorded from Scotland (Leith), Ireland (from the timbers of a vessel returning from a foreign voyage) and Grimsby (MOLL & ROCH, 1931. The Teredinidae of the British Museum, etc. Proc. Malac. Soc. London, Vol. 19, p. 213—214).

The above record from the beach between IJmuiden and Zand-voort in the Netherlands is the first for the continent of Europe. A previous reference by Moll (1941, Uebersicht über die Teridiniden des Museums für Naturkunde zu Berlin. Sitz. Ber. Ges. naturf. Freunde Berlin, 1941, p. 204) according to which the Berlin Collection is credited with having shells, pallets and wood with perforations of this species "admittedly from the great shipworm pest in the Netherlands in 1732" must be erroneous. The identification may be quite correct, but there must be a mistake in the locality.

SAMENVATTING

In 1948 werd op het strand tussen IJmuiden en Zandvoort een aangespoelde balk gevonden, welke talrijke schelpen en paletten bevatte van Bankia fimbriatula Moll & Roch. Deze soort is te voren nooit op het vasteland van Europa aangetroffen (wel in de Britse Eilanden). Het oorspronkelijke vaderland van Bankia fimbriatula is de westelijke Atlantische Oceaan van Florida tot Brazilië.