

which 139 were Ibo subjects, all of them inmates of Uzuakoli Leprosarium, and 65 were Yoruba subjects attending University College Hospital, Ibadan. Assay for glucose-6-phosphate dehydrogenase³ was carried out on all 20 persons found deficient by the rapid screening test, and on 18 normal subjects. Our results are shown in Table 1.

Table 1. INCIDENCE OF DEFICIENCY OF GLUCOSE-6-PHOSPHATE DEHYDROGENASE IN RED CELLS OF 200 MALE NIGERIANS

Tribe	No. examined	No. deficient
Ibo	139	9
Yoruba	65	11

The demonstration of the presence of the trait in Nigeria raises several interesting problems: (1) The suggestion made by Motulsky³ that subjects lacking the enzyme may exhibit a relative resistance to falciparum malaria could be investigated by field-studies of children less than five years of age, and by a study of severely ill malarial children admitted to hospital. (2) The presence of the trait may determine the onset of hæmolytic anæmia induced by dapson in Nigerian leprosy patients, the incidence of which is approximately 10 per cent (Davey, F., personal communication). (3) The tribal distribution of the trait will have to be assessed in a far larger group of unselected persons. (4) The presence of the trait in adult Nigerians should be looked for in cases of unexplained hæmolytic anæmia often summarily dismissed as 'blackwater fever'.

The co-operation of Drs. F. Davey and L. Hogerzeil in obtaining blood samples is greatly appreciated.

H. M. GILLES
J. WATSON-WILLIAMS
B. G. TAYLOR

The Liverpool School of Tropical Medicine,
Liverpool 3, and the
Departments of Medicine and Pathology,
University College,
Ibadan, Nigeria.

¹ Beutler, E., *Blood*, 14, 103 (1959).

² Garson, P. E., Flanagan, C. L., Ickes, C. E., and Alving, A. S., *Science*, 124, 484 (1956). Szeinberg, A., Sheba, C., and Adam, A., *Nature*, 181, 1256 (1958). Gross, R. T., Hurwitz, R. E., and Marks, P. A., *J. Clin. Invest.*, 37, 1176 (1958). Childs, B., Zinkham, W., Browns, E. A., Kimbro, R. L., and Torbert, J. V., *Bull. Johns Hopkins Hosp.*, 102, 21 (1958).

³ Motulsky, A. G., and Campbell, J. M., *Blood* (in the press).

A New Record of *Mytilicola intestinalis* Steuer, a Parasitic Copepod of Mussels

SINCE the description of *Mytilicola intestinalis* by Steuer in 1902¹ from Trieste, it has been found in various localities of the Mediterranean and appears to have spread from this area to the Atlantic seaboard of Europe and around the British Isles². Infection with this parasite has resulted in serious damage to mussel beds in many areas, with an attendant effect on the mussel industry³. Any information regarding the spread of this parasite is consequently of some importance. It is therefore interesting to record the taking of two female *M. intestinalis* in the Indian Ocean-Malacca Strait area, position 7° 12' N., 97° 12' E.

The two specimens taken (Fig. 1), approximately 8.5 mm. and 7.0 mm. long, were sufficiently distinctive to refer to this species rather than to either of the two other described species, namely, *M. orientalis* Mori and *M. porrecta* Humes. Dr. Krishnaswamy, of the University of Southampton, has kindly examined the specimens for me and agrees with the identification.



Fig. 1. Adult female *Mytilicola intestinalis*, 8.5 mm. and 7.0 mm. long

The circumstances in which the two specimens were taken were quite remarkable, both being taken in a surface plankton sample, during darkness, while the ship was drifting, hove to. The station was 50 miles outside the 100-fathom line and 67 nautical miles from the nearest land; the depth was 520 fathoms (951 m.).

There is no question of any contamination from European sources, nor is there the possibility that they had been carried from the shore since the water was clear blue and typically oceanic, as was the plankton. The possibility that they had been carried to the surface by currents is considered non-existent. Both my colleague on the cruise and myself are of the opinion that there was no growth of mussels on the ship's hull, although the possibility cannot be ruled out entirely (*M. viridis* L. is the common *Mytilus* of this area). Even if there were infected mussels on the hull it is difficult to explain how the parasites left the host and entered the net, which was some yards from the hull. The possibility that they had been regurgitated by a mussel-eating fish or bird is discounted in view of the excellent condition of the specimens. That adult female *Mytilicola* can be planktonic appears doubtful since the parasite has so far been taken only inside the mussels and never free.

However this may be, the occurrence of this species in the Malacca Strait extends its range of distribution, and increased collection in other areas may well prove the species to be more widely distributed than was hitherto known.

J. WICKSTEAD*

Singapore Regional Fisheries
Research Station.

* Present address: The Laboratory, Citadel Hill, Plymouth.

¹ Steuer, A., *Zool. Anz.*, 25, 635 (1902).

² Bolster, G. C., *Fish. Invest., Lond.*, 18 (6), 30 (1954).

³ Hepper, B. T., *Fish. Invest., Lond.*, 20 (3), 21 (1955).

First Successful Hybrid between the Two Jute-yielding Species, *Corchorus olitorius* L. (Tossa) × *C. capsularis* L. (White)

ALTHOUGH numerous attempts had been made in the past to cross the two jute-yielding species, namely, *C. olitorius* and *C. capsularis*, no success was achieved¹. The recent report by Ganesan *et al.*² that following hybridization between the two species a few-celled embryo and few free endosperm nuclei are formed encouraged us to repeat the above crosses. The failure to obtain hybrid seedlings has been attributed by these authors to the degeneration of embryo and endosperm at an early stage of their development. An attempt was therefore made to induce the full