DRAGONFLIES FROM MANGAIA, COOK IS-LANDS

During an ichthyological expedition Dr Ronald Fricke of the Staatliches Museum für Naturkunde Stuttgart, Germany, visited Mangaia Island. During 21-25 June 1996, he collected some Odonata above the western coast, in a primary bush near Kaumata Village (21°55'50"S, 157°57'33"W; alt. 25 m), viz. Diplacodes bipunctata (Br.): 1 &, 1 \(\varphi\); - Pantala flavescens (Fabr.): 1 &.

The three specimens were conserved in alcohol and, nevertheless they have gotten somewhat damaged in the mail. The male *D. bipunctata* had 10 water mite larvae ventrally on the thorax, and the female had 6 of these in the same position, and another one laterally near the basis of the right midleg.

Mangaia is the southernmost island of the Republic of Cook Islands, situated 250 km SE of Rarotonga. The island is of volcanic origin, roughly round, with a maximum of 8 km diameter. It consists of an ancient eroded volcano, 169 m high, which is surrounded by a wide former lagoon and an atoll reef. Morphologically it is similar to the Bora-Bora island, but it was uplifted in the Late Tertiary, and the ancient lagoon and reef wall are now dry (40 and 70 m a.s.l., respectively). There is a number of small lakes and swamps in the former lagoon. The island is now surrounded by a very

narrow fringing reef. Though still at a tropical latitude, a cool ocean current supports a climate distinctively cooler than that of Rarotonga. There is but little primary palm and bush forest left, mainly around the outer slopes of the uplifted reef wall, the area where the dragonflies were collected.

Both species are also known from Rarotonga (F. RIS, 1911, Colins zool. Selys Longchamps 12: 385-528, - 1913, ibid. 15: 837-964), and they are common in Oceania. P. flavescens is a circumtropical migrant and well known from many islands. D. bipunctata is found throughout most of the South Pacific, from the Bonin Islands and Australia to the Marquesas, the Tuamotu Islands and Rapa (B.F. BELYSCHEW, 1968, Dt. ent. Z. (NF) 15: 9-13; E. SCHMIDT, 1938, Ann. ent. Soc. Am. 31: 322-344). The nearest records are from Tahiti (F.M. BRAUER, 1865, Verh. zool.-bot. Ges. Wien 15: 501-512), Niue (R. ROWE, 1987. The dragonflies of New Zealand. Auckland Univ. Press, Auckland) and Samoa (T.W. DONNELLY, 1986, Notul. odonatol. 2: 109-112).

A. Martens, Zoologisches Institut der Technischen Universität Braunschweig, Fasanenstrasse 3, D-38092 Braunschweig, Germany