

## Some Pacific Criconematina (Nemata)

KEN J. ORTON WILLIAMS

Commonwealth Institute of Parasitology, 395A Hatfield Rd.,  
St. Albans, Hertfordshire AL4 0XU, England \*

**ABSTRACT.** Several new or little known Criconematina are reported from Fiji, New Guinea, Tonga and Western Samoa. *Paratylenchus tui* n.sp. from Vava'u, a northern island in the Tonga group, most resembles *P. vandenbrandei* De Grisse, 1962, in measurements and lateral field but the anterior portion of the head is modified into a prominent disc, offset by constriction, distinguishing *P. tui* n.sp. from this and other species. *Gracilacus aonli* (Misra & Edward, 1971) is redescribed from a Western Samoan population. A new genus, *Syro*, is described in the subfamily Criconematinae for four species (three of them new) indigenous to New Guinea and three known species from tropical Africa. The genus is based on criteria which have not formerly been much considered in the group or have been overlooked, namely: form of head, uneven arrangement of appendages around body, appendages (whatever their shape) produced by basic dichotomy at least posteriorly, and a short, triangular postvulval region of few annules bearing long dichotomous trailing appendages. The genus consists of: *S. vexillatrix* n.sp., *S. chrisbarnardi* (Heyns, 1970) n. comb., *S. coronatus* (Schuermans, Stekhoven & Teunissen, 1938) n. comb., *S. dracomontanus* (Van den Berg, 1983) n. comb., *S. hughdavidi* n.sp., *S. orphreyifer* n.sp. and *S. melanesicus* (Andrássy, 1979) n. comb.; information additional to the original description is given on the last of these.

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Several genera have been established to accommodate unusual species of Criconematina from Australia, New Zealand and the islands of the Central and South Pacific (*Blandicephalanema* Mehta & Raski, 1971; *Pateracephalanema* Mehta & Raski, 1971; *Colbranium* Andrassy, 1979 and *Amphisbaenema* Orton Williams, 1982). Considering the vastness of the region, the evolution within it of so many unique plants and animals and the scant attention it has received from nematologists, it would be surprising if there were not others. Among the taxa reported here is a group of closely related new species from New Guinea. These have clear affinities with three previously described species from Africa which have not hitherto fitted very satisfactorily into any of the existing genera. With the addition of one further species recently described from New Britain, all these are considered to constitute a new and distinct genus.

### Materials and Methods

Species from New Guinea were recovered in a survey for plant parasitic nematodes undertaken by Drs John Bridge and Sam Page, Oct. - Dec., 1982; material from Fiji, Western Samoa and Tonga came from a survey which I made in the region during 1976 - 1977. Specimens were heat killed, fixed in either 4% formalin or F.A. 4:10, cleared in lactophenol and processed to glycerin containing traces of picric acid by a modified Baker method.

Abbreviations used in the tables are fully explained in Orton Williams, 1982. They include: L ex (distance of excretory pore from anterior end of body), L t (tail length), W1 ca (width of first cephalic annule, W1 ba (width of first body annule) and W v (width at vulva).

\*Contact address: 28 Partridge Rd., Aylsham, Norfolk NR11 6DQ, England