

(0-15 and 15-30 cm) at monthly intervals for a period of two years was studied. Maximum nematode population/250g soil was recorded in April and October. The plant-parasitic nematodes were observed to increase from March to April and September to October. Relatively, larger number of nematodes were recovered at 30 than 90 cm distance from tree trunk at both the depths. Populations registered at 0-15 cm was slightly higher than 15-30 cm at both the horizontal distances. A similar trend as that of total nematode population was noticed for the population of *Tylenchulus semipenetrans* in the soil and roots. Numbers of 3rd and 4th stage larvae of this nematode were highest in October and lowest in February. Higher numbers of this nematode in April and October appears to be due to the prevalence of conducive conditions for its multiplication and availability of sufficient fresh roots in these months. Populations of *Xiphinema insigni*, *Helicotylenchus dihystera* and *Pratylenchus pratensis* increased considerably from October to December. *Hoplolaimus indicus* population showed increase from April to July. This rise in the populations of these nematodes may be ascribed to the favourable temperature and moisture conditions.

NOTES ON THE SYSTEMATIC POSITION OF THE GENUS *NYGELLUS*
THORNE, 1939. : Maqsood Ahmad and M. Shamim Jairajpuri, Section of Nematology, Department of Zoology, Aligarh Muslim University, Aligarh-202001.

The genus *Nygellus* Thorne, 1939 is distinct among all dorlyaim nematodes as it shares the characters of the super-families Nygolaimoidea De Coninck, 1965 (possession of a mural tooth) and Belondiroidea Thorne, 1964 (possession of spiral muscle sheath). Thorne (1939) placed this genus under the family Belondiridae while Jairajpuri (1964) proposed a separate family Nygellidae for its reception. Since then, the position of this peculiar nematode has remained controversial. Thorne (1964), Siddiqi (1968), Ferris (1971) included *Nygellus* as well as the family Nygellidae under Belondiroidea while Heyns (1968) and Andrassy (1976) considered it under Nygolaimoidea. Recently, Jairajpuri & Ahmad (1980) did not include it under Belondiroidea. The genus at present includes only three species and all these possess a mural tooth, cardiac glands at base of oesophagus and spiral muscle sheath around the basal expanded portion of oesophagus. Study of a large number of specimens of *Nygellus clavatus* Thorne, 1939 collected from Jorhat (Assam) revealed the definite presence of a spiral muscle sheath around the expanded portion of oesophagus though the sheath is not very conspicuous. We, therefore, suggest that this genus be included under the superfamily Nygolaimoidea

of the suborder Nygolaimina Ahmad & Jairajpuri, 1979 because of the presence of mural tooth and the cardiac glands, both of which are characters of fundamental importance in dorylaim systematics. The presence of spiral muscle sheath has already been reported in some other genera outside Belondiroidea as also pointed by Jairajpuri & Ahmad (1980).

PREVALENCE AND INTENSITY OF NEMATODE INFESTATION IN TEA PLANTATIONS OF WEST BENGAL : B. Mukherjee and M.K. Dasgupta, Plant Pathology Laboratory, College of Agriculture, Visva-Bharati University, Sriniketan-731236, W.B.

Analysis of 120 soil and root samples collected from five widely distributed tea estates and plantations in Darjeeling District, West Bengal showed presence of nineteen species of plant parasitic nematodes belonging to thirteen genera of which sixteen were hitherto unknown in West Bengal. Intensity of nematode infestation was compared and analysed by relative frequency, relative population density and prominence value of the nematode species at different locations. Nematode densities varied greatly with plantations, ranging from less than 10 to more than 950 nematodes per 250 ml soil. *Helicotylenchus dihystera* ranked first in mean population density/site and prominence value, although it was less frequent as compared to other nematode species. *Helicotylenchus* spp., *Pratylenchus loosi* and *Macroposthonia ornata* were also considered prominent in these tea plantations. *Pratylenchus loosi*, *Paratylenchus lepidus*, *Atlantodorus porosus*, *Aglechus agricola*, *Coslenchus* spp, have been found to be associated with tea for the first time from India. All species are new with respect to geographical distribution.

PROTRELLATUS SP. FROM THE COMMON HOUSE CRICKET, *GRYLLUS DOMESTICUS* : K. Vijayalakshmi and E. Khan, Division of Nematology, Indian Agricultural Research Institute New Delhi-12.

Nematodes belonging to genus *Protrellatus* Farooqui, 1970 were found parasitising the common huose cricket, *Gryllus domesticus*. The crickets were collected from stacked earthen pots in the Division of Nematology, Indian Agricultural Research Institute, New Delhi and dissected in 1% NaCl solution. The nematodes (females and juveniles) were present in the intestinal region of the host. The incidence of infestation was quite high 1 to 8 nematodes in 80% crickets.