

3. DUCHARME, E. P. and R. F. SUIT. 1953. Nematodes associated with avocado roots in Citrus spreading decline areas. *Pl. Dis. Repr.* 37(8):427-428.
4. MINZ, G. 1957. Free-living plant-parasitic and possible plant-parasitic nematodes in Israel. *Pl. Dis. Repr.* 4(2):92-94.
5. MINZ, G., D. STRICH-HARARI and E. COHN. 1963. Plant parasitic nematodes and their control. Tel-Aviv Sifriat Hassadeh Publishing House. 84 pp. (In Hebrew).
6. OOSTENBRINK, M. 1960. Estimating nematode populations by some selected methods. In *Nematology*, J. N. Sasser and W. R. Jenkins, eds. Univ. N. Carolina Press, Chapel Hill. pp. 85-102.
7. PEACOCK, F. C. 1956. The reniform nematode in the Gold Coast. *Nature, Lond.* 177:489.
8. SCOTTO LA MASSESE, C. 1969. The principal plant nematodes of crops in the French West Indies. In *Nematodes of Tropical crops*, J. E. Peachey (ed.). Tech. Communi. No. 40, Commonw. Bur. Helminth., St Albans, Herts., England. pp. 164-183.
9. SEINHORST, J. W. 1966. Killing nematodes for taxonomic study with hot FA-4.1. *Nematologica* 12 178.
10. SHER, S. A. 1955. Nematodes attacking avocado. *Calif. Citrogr.* 40(5):198.
11. SHER, S. A., F. A. FOOTE and S. B. ROSWELL. 1959. A root lesion nematode disease of avocados. *Pl. Dis. Repr.* 43:797-800.
12. YOUNG, T. W. and G. D. RUEHLE. 1955. The role of the burrowing and meadow nematodes in avocado decline. *Pl. Dis. Repr.* 39:815-817.

## RESUMO

Um levantamento taxonômico da fauna nematológica associada com o deprecimento de abacateiro (*Persea americana* Mill.) na Bahia, foi realizado em 1971-72. Nove gêneros de nematodes conhecidos ou suspeitos de serem parasitos de plantas foram isolados de 18 amostras de solo coletadas em Buerarema, Itabuna, Itajuípe, Itapé e Urucuca. Os nematoides encontrados no presente levantamento são: *Helicotylenchus dihystera*, *Xiphinema* sp., *X. setariae*, *X. basiri*, *Rotylenchulus reniformis*, *Dolichodorus* sp., *Hemicycliophora* sp., *Meloidogyne* sp., *Tylenchus* sp., *Trichodorus* spp., *Aphelenchus avenae*. É o primeiro registro de todos estes nematoides associados com abacateiros na Bahia, Brazil.

PLANT NEMATODES ASSOCIATED WITH JACKFRUIT (*ARTOCARPUS HETEROPHYLLUS* LAM.) IN BAHIA, BRAZIL [NEMATODOS FITOPARASITOS ASOCIADOS CON EL ÑAME ISLEÑO (*ARTOCARPUS HETEROPHYLLUS* LAM.) EN BAHIA, BRAZIL].  
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## SUMMARY

The following known or suspected plant parasitic nematodes were found in association with the jackfruit tree (*Artocarpus heterophyllus* Lam.) in Bahia, Brazil: *Xiphinema setariae*, *Rotylenchulus reniformis*, *Helicotylenchus dihystera*, *Trichodorus* sp., *Peltamigratus* sp., *Meloidogyne* sp., and *Aphelenchus avenae*.

## INTRODUCTION

The jackfruit or jack (*Artocarpus heterophyllus* Lam.) grows in Bahia as stray trees in cacao plantations where it flourishes in the humid climate on hill slopes. Jackfruit is an important source of food for the people living in the rural areas of the State of Bahia. The literature available on the nematodes attacking jackfruit is from the Congo (1) and India (2).

## MATERIALS AND METHODS

In May, 1971, the first general survey of nematodes was initiated to determine the genera of known and possible plant parasitic nematodes present within the cacao region of the State of Bahia, and the distribution of these nematodes according to host, soil type, and geographic area.

Two trees showing dieback of twigs and yellow foliage were sampled for nematodes. Soil and root samples were collected from around the roots of jackfruit trees growing in loamy soil in the Cacao Research Centre, Itabuna. Nematodes were isolated and fixed in 5 % formalin by known methods and later permanent mounts were made in dehydrated glycerin.

## RESULTS AND DISCUSSION

Soil and root assays showed that high populations of plant parasitic nematodes, principally *Xiphinema setariae* Luc 1958, and *Rotylenchulus reniformis* Linford and Oliviera 1940, were associated with both of the samples; *Helicotylenchus dihystra* (Cobb, 1893) Sher 1961, *Trichodorus* sp., *Peltamigratus* sp., and *Meloidogyne* sp. with one of the samples. The suspected plant parasite *Aphelenchus avenae* Bastian, 1865 was also present in one of the samples. The roots collected were discoloured.

The occurrence of *Helicotylenchus*, *Pratylenchus*, and *Tylenchus* from around the roots of jackfruit have been reported from India (2) and *Meloidogyne* from the Congo (1). The rest of the above mentioned nematodes are reported for the first time associated with jackfruit from Bahia, Brazil.

## REFERENCES

1. GHESQUIERE, J. 1921. Laboratoire d'Entomologie d'éala (Equateru). R. apports de L'entomologiste. Bull. Agric. Congo Belge 12:703-732.
2. KHUNTIA, W. and S. N. DASS. 1969. Plant parasitic nematodes associated with fruit trees in Orissa. All India Nematology Symposium (New Delhi, 21st - 22nd August). pp. 22-23.

## RESUMEN

Los siguientes nematodos fitoparásitos o probablemente fitoparásitos fueron encontrados asociados al ñame isleño, *Artocarpus heterophyllus* Lam., en Bahia, Brasil: *Xiphinema setariae*, *Rotylenchulus reniformis*, *Helicotylenchus dihystra*, *Trichodorus* sp., *Peltamigratus* sp., *Meloidogyne* sp. y *Aphelenchus avenae*.