for controlling nematodes population and increasing plant growth.

REFERENCES

Bhatti, D.S. & Jain, R.K. (1977). *Indian Journal of Nematology* **7:** 37-41.

Goswami, B.K. (1993). *Indian Journal of Plant Protection* **21:** 87-89.

Goswami, B.K., Haque, M.M., Mishra, S.D. & Mojumder, V. (1989). *Annals of Agricultural Research* **10:** 316-318.

Khan, M.R. & Goswami, B.K. (2000). *Indian Journal of Nematology* **30:** 5-7.

Pandey, Rajesh Kumar, Goswami, B.K. & Singh, S. (2005). *International Chickpea and Pigeonpea Newsletter* **12:** 32-34.

Singh, R.S. & K. Sitaramaiah (1996). *Plant Diseae Reporter* **50:** 668-672.

Record of the Rice Cyst Nematode, *Heterodera oryzae* in Kerala, India

V K. SOSAMMA AND P.K. KOSHY

Central Plantation Crops Research Institute, Regional Station, Krishnapuram 690533, Kayangulam, Kerala, India. E-mail: sosammavk@hotmail.com

The rice cyst nematode, *Heterodera oryzae* was reported to occur on rice in Orissa (Rao, 1965). Samples collected from banana and rice fields near Panchayat Public Well in Karunagappally Quilon distict, Kerala, in 1984 recorded the presence of cyst forming nematodes on roots of both the crops. Detailed examination of the population and comparison with paratypes of *Heterodera oryzae*, *H. oryzicola* and *H. elachista* confirmed its identity as *H. oryzae* Luc & Brizuela, 1961. The nematode is known to parasitize rice in Ivory Coast (Luc & Brizuela, 1961) and rice and banana in Senegal (Taylor, 1978). *H. oryzicola* is known to parasitize both banana and rice in Kerala (Charles & Venkitesan, 1984). *H. oryzae* could be separated from *H. oryzicola* by body length and hyaline tail terminal length of second stage juveniles. The measurements are : Second stage juveniles: L= 0.423mm (0.376-0.465) ; a=24.4 (19.6-28.0); b=5.2 (4.2-6.0); b'= 2.6 (2.2-2.8); c= 7.5 (6.7-8.3); Stylet length= 19.5 mm (18.8-21.1); conus length = 8.3 mm (7.8- 8.6); anterior end to crescentic valve center = 59.4 mm (51.6-70.9); anterior end to excretory pore = 89.4 mm (78.4 – 98.0); tail length=57.1 mm (46.2 – 68.9); hyaline tail region = 31.4 mm (21.9 – 36.0); hyaline tail region/stylet ratio = 1.6 (1.0-1.8); lateral lines=3; cyst cone tops : fenestral length= 24.2 mm (19.4-32.3); fenestral width= 27.7 mm (21.9-33.5); vulval slit length= 39.4 mm (33.5-45.2); under bridge length=90.3 mm (71.0-103.2); distance of anus from vulval slit=40.5 mm (33.5-46.4).

It is likely that the population on banana and rice in Kerala could be a mixture of *H. oryzae* and *H. oryzicola.*

ACKNOWLEDGEMENT

The junior author is grateful to late Dr. A. R. Stone, Head, Nematology Department, Rothamsted Experimental Station, England for providing facilities and paratypes of *Heterodera oryzae*, *H. elachista* and *H. oryzicola* for comparison.

REFERENCES

Charles, J.S. & Venkitesan, T.S. (1984). *Indian Journal of Nematology* **14**: 181-182

Luc, M & Brizuela, R.B. (1961). *Nematologica* **6**: 272-279.

Rao, V. N. (1965). *Oryza* **2:** 183

Taylor, D. P. (1978). *Revue de Nematologie* **1**: 165-169.