Occurrence of White Tip Disease of Rice in Gujarat

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During Kharif 1984, a sample of diseased rice plant was received from a cultivator of village Napad, taluka Anand district Kaira of Gujarat State. The microscopic examination of the diseased spikelets revealed the presence of plant-parasitic nematode *Aphelenchoides* sp. The number of nematodes in a diseased spikelet varied from 3 to 8.

A field visit was carried out to find out the incidence of the disease and the study of symptoms. The observations of the field indicated ten per cent of the panicles severely infected without having any effective kernels. While, some of the panicles were also partially affected by the disease. Thus, on a rough estimate the losses in yield were about 10-15 per cent. The rice variety as reported by the farmer was strain 81-3.

The affected plants were having shortened and twisted flag leaves, panicles shortened with reduced number of spikelets, spikelets unfilled and deformed in shape and yellowish brown in colour. The mottling of seed coat and crinkling of grains was also observed. The diseased plants were having characteristically white tips on leaves.

For species identification the diseased panicles were sent to Dr. Y. S. Rao, Senior Nematologist, Central Rice Research Institute, Cuttack (Orissa) who has identified the cause of the disease to be the white tip nematode, *Aphelenchoides besseyi* Christie, 1942.

As the nematodes directly affect the spikelets and panicles results in direct reduction of grain yield. Similar disease from Central Provinces of India was also reported by Dastur (1936). However, this record is a first record for the occurrence of *Aphelenchoides besseyi* Christie, 1942 on rice from the State of Gujarat.

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REFERENCE

Dastur, J. P. (1936). A nematode disease of rice in the Central Provinces. *Proc. Indian Acad. Sci.* **4**: 108-121.