difference in results was obtained.

Although there was a significant positive correlation ($r^2 = 0.439^{**}$) between cold tolerance at early seedling stage and seedling stage (10 to 30 days after sowing), the low correlation warrants the two different screenings for elite lines or varieties and possible donor varieties. ■

Pest management and control DISEASES

Widespread occurrence of sheath rot in Bihar

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Sheath rot of rice caused by *Acrocylindrium oryzae* (revised as *Sarocladium oryzae*) was observed in Bihar for the first time during kharif 1977 at ARI, Mithapur, in national screening nursery (NSN) and International Rice Yield Nursery (IRYN) trials.

In the 1979 kharif, sheath rot was reported at the RAU Regional Research Institutes at Sabour, Bhagalpur; Dholi, Muzaffarpur; Kanke, Ranchi; and Mithapur, Patna. The symptoms are limited to complete discoloration of the ultimate leaf sheath, a high proportion of unfilled grains, grain discoloration, and choking of panicles. ■

Effect of some fungicides on the control of narrow brown leaf spot of rice

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Narrow brown leaf spot of rice caused by *Cercospora oryzae* occurs in severe proportion during samba (Aug-Jan) and thaladi (Oct-Feb) seasons. A pot culture experiment during 1979 thaladi studied fungicides for controlling the disease. The rice variety IR20, which is susceptible to narrow brown leaf spot, was raised in concrete pots. The test fungicides — carbendazim, carboxin, zineb, edifenphos, and Cuman L at 0.2% levels were sprayed on the rice plants twice at 10-day intervals at maximum tillering. The natural occurrence of the disease was rated according to the 1975 Standard Evaluation System for Rice.

Foliar spray with fungicides significantly reduced the narrow brown leaf spot. Among the fungicides, carbendazim was the most effective, followed by carboxin (see table). ■

Fungicides for control of narrow brown leaf spot of rice. Tamil Nadu, India.

Fungicide	Mean disease incidence (%)
Carbendazim	5.2
Carboxin	8.7
Zineb	10.5
Edifenphos	13.8
Cuman L	28.3
Untreated control	39.3

Influence of neem cake and coal-tar-coated urea on bacterial blight of rice

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A glasshouse experiment investigated the effect of slow-release nitrogenous fertilizers, such as neem cake + coal tar and coal-tar-coated urea, on the incidence of bacterial blight of rice on Taichung Native 1.

Two levels of nitrogen — 100 and 200 kg N/ ha — were applied separately as basal and 3 split doses. In the split application, 25% was applied at transplanting, 50% at maximum tillering, and 25% at the time of inoculation. Sixty-day-old plants were clip-inoculated with a virulent strain of *Xanthomonas oryzae.* The lesion length, plant height, and tiller numbers were recorded 14 days after inoculation.

There were 13 treatments in the experiment, including uncoated urea and the control.

The results indicated that disease incidence, plant height, and tiller number were maximum in treatments with 200 kg N and neem cake and coal tar and were lowest in the control. There is evidence that slow release of nitrogen as urea or neem cake or coal-tar treated urea increased lesion length.

Field trials are in progress to confirm the study and yield in different treatments. ■

Effect of the application of neem cake + coal tar and coal-tar-coated urea on bacterial blight incidence, plant height, and tiller number of rice plants. Andhra Pradesh, India.

Treatment	Application time	Nitrogen (kg/ha)	Lesion length (cm)	Plant ht (cm)	Tiller no.
Uncoated urea	Basal	100	5.4	75.6	5.3
Uncoated urea	Split	100	8.5	80.6	4.7
Uncoated urea	Basal	200	6.1	78.4	5.8
Uncoated urea	Split	200	9.6	83.2	7.2
Neem cake + coal-tar-coated urea	Basal	100	6.3	77.5	5.0
Neem cake + coal-tar-coated urea	Split	100	10.6	83.1	5.8
Neem cake + coal-tar-coated urea	Basal	200	8.3	84.2	8.1
Neem cake + coal-tar-coated urea	Split	200	10.9	88.2	8.7
Coal-tar-coated urea	Basal	100	10.1	82.1	5.3
Coal-tar-coated urea	Split	100	8.4	80.6	5.8
Coal-tar-coated urea	Basal	200	10.2	86.4	9.8
Coal-tar-coated urea	Split	200	8.8	81.1	6.8
Control		0	5.2	71.0	3.5