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ZONATE LEAF BLIGHT—A NEW DISEASE OF FINGER MILLET

P. C. HIREMATH and V. V. SULLADMATH

*Department of Plant Pathology,
University of Agricultural Sciences,
Dharwad 580 005, India*

INDAF varieties of finger millet/*Eleusine coracana* (Linn) Gaertn released by the University of Agricultural Sciences, Bangalore have been found to be infected with a new fungal disease at the Regional Coconut Research Station, Arsikere.

The infection was noticed on 80-day old plants and the infected plants remained pale, stunted and later blighted. Freshly infected leaves showed minute light brown to dark brown, oblong spots surrounded by light yellow margin. Individual lesions were 1–1.8 cm in length and 0.5–1 cm in breadth. When such lesions coalesced the blighted portions measured 7–10 cm in length. Later, the blighted areas turned to light grey with light brown to brown wavy bands, which gave a characteristic zonation (figure 1). Coalescence of several lesions resulted in blighting of a large part of the leaf blade and finally affected leaves dried leaving the faint zonations on the affected areas. Hence, the disease has been named "zonate leaf blight".

Repeated tissue isolates on acidified potato dextrose agar yielded a pure culture of *Drechslera* sp. A week-

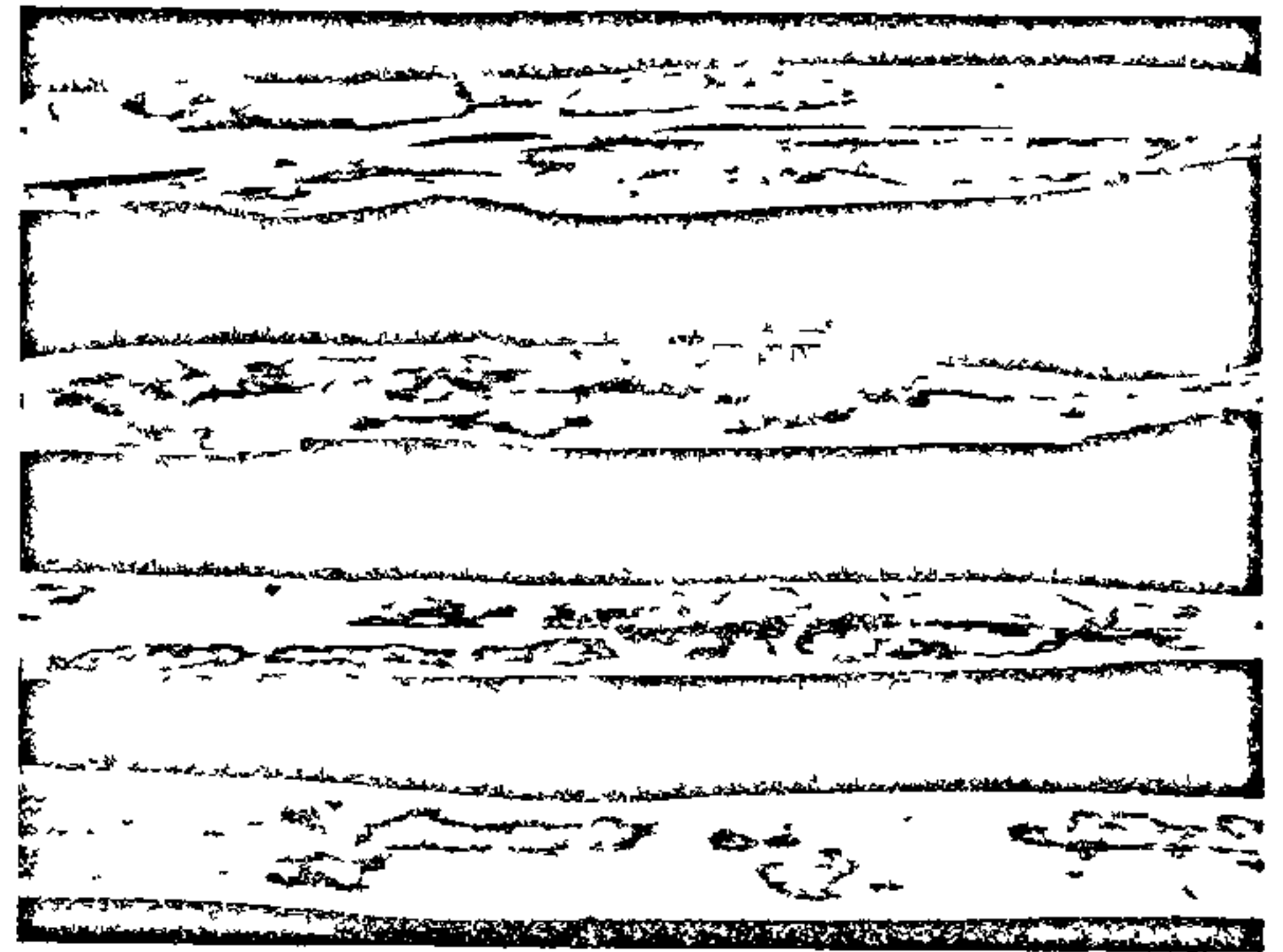


Figure 1. Zonate leaf blight of ragi.

old sporulating culture was successfully used to produce artificial infection on healthy plants. The characteristic lesions were noticed on the leaves within 72 hr of inoculation.

The fungus exhibited light grey to olivaceous mycelial mat with scanty sporulations on PDA. Conidiophores were solitary, occasionally in small groups, straight, geniculate, pale to light brown, and measured 125–200 $\mu\text{m} \times 4\text{--}6\ \mu\text{m}$. Conidia were straight to slightly curved, fusiform, light brown to golden brown, smooth and measured 45–95 \times 8–16 μm with 5–10 pseudosepta. Fungus also produced abundant chlamydospores when kept on PDA for more than 20 days.

Based on the morphological characters, the fungus has been identified as *Drechslera setariae* (Sawada) Subram & Jain. The culture has been deposited at CMI, Kew, Surrey, England 234254 a. *D. setariae* has been recorded on seeds¹ and plants² of *Setaria italica* Beauv. However, the pathogen was not recorded so far on finger millet in India. Thus, it constitutes a first record from India as one of the hosts for *D. setariae* and a new disease on finger millet.

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