

Table 2. Combined analysis of finger millet yields from Jharkhand, India, rainy seasons 2000 and 2001¹

	Factor	Yield	SE mean	Significance	LSD (5%)
Year		45	NS	126	
	2000	2207			
	2001	2133			
Variety			78	0.001	220
	A 404	2526			
	Birsa Marua 2	2127			
	HR 374	1968			
	VL 149	2157			
	KARRA 1	2189			
	ZAH 1	2055			
Priming			45	0.001	125
	Not primed	2031			
	Primed	2310			

1. Main effects only. Overall CV (%) = 12

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Pests and Diseases

Long Smut in Pearl Millet—A New Record from Eritrea

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Long smut was observed on pearl millet [*Pennisetum glaucum* (L.) R. Br.] panicles (Fig. 1) in two fields at Megareh (15°47'N, 38°25'E) in Keren subzone, and at Bogu (15°25'N, 38°25'E) in Hagaz subzone of Anseba zone, Eritrea, during the 2000 rainy season. There are no references to this disease in the scientific literature on pearl millet. The incidence of long smut varied from 1% at Bogu to 60% at Megareh. The sorus was long, cylindrical, sometimes with a slight curve at the middle or at the tip, and contained a black mass of spores covered by a whitish to dull yellow, fairly thick membrane (Fig. 2). The sorus was 3-4 times larger than a normal grain of pearl millet. The disease is very well differentiated from grain smut caused by *Tolyposporium penicillahaе* (Bret.) by its size and shape. The fungus causing the long smut in pearl millet was identified by Kalman Vanky as *Sporisorium ehrenbergii* (Kuhn)



Figure 1. Long smut on pearl millet in Eritrea



Figure 2. Long smut on pearl millet in Eritrea showing the shape and size of sori

K. Vanky (syn. *Tolyposporium ehrenbergii* (Kuhn) Patouillard) (personal communication). Vanky, an authority on the taxonomy of smut fungi, confirmed this as a first record on pearl millet. The authors have heard anecdotal reports of long smut on pearl millet in dry regions of Kenya and the Sudan.

Acknowledgments

The authors would like to express their appreciation to the Department of Agricultural Research and Human Resource Development (DARHRD) staff who spared time to help in the survey during the 2000 rainy season. Thanks are also due to the Danish government for funding the survey. V P Rao and A G Bhasker Raj are thankful to R P Thakur, C T Hash and F R Bidinger, International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), for facilitating the survey.

Prevalence of Pearl Millet Downy Mildew in Eritrea

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Introduction

Pearl millet [*Pennisetum glaucum* (L) R.Br.] is the second most important food crop grown mainly by small-scale farmers in low and mid elevations in Eritrea. Downy mildew (DM) caused by *Sclerospora graminicola* (Sacc.) J. Schrot., a major constraint to pearl millet production in much of the semi-arid tropics (Singh et al. 1993) is widely distributed in Eritrea where it often occurs in epidemic form on farmers' landraces. A systematic survey of the prevalence and severity of DM in farmers' fields was carried out under an ICRISAT-Danida-Eritrea project to better understand its distribution and develop control measures.