

from 53.96 to 49.10 and the per cent weight loss ranged from 86.90 to 76.08 (earhead); 88.19 to 76.02 (grain) and 78.71 to 67.52 (fodder).

During 1985, similar results were obtained. The maximum plant height (145.6 cm), earhead, grain and fodder weights (8.79, 7.02 and 10.24 g, respectively) were observed in the treatments where earheads were produced on main stem. The per cent decrease of plant height ranged from 59.47 to 44.36. The per cent weight loss ranged

from 65.98 to 60.06 (earhead); 78.63 to 68.37 (grain) and 50.39 to 23.63 (fodder).

Thus the study indicated that the tillers (caused by shootfly attack) though produce earheads do not compensate the grain and fodder yield losses.

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#### A Note on the Occurrence of *Ephelis oryzae* on Sudangrass

During the survey of plant diseases, the authors noticed a severe out break of udbatta disease on sudangrass [*Sorghum vulgare* var. *sudanense* (Piper) Hitchc] grown at Agricultural College farm Hebbal campus, Bangalore. The incidence was as high as 20 to 60 per cent. In the infected

plant all the tillers, panicles which pushed out from boot leaf showed greyish to silvery, cylindrical rod hard structures (Fig. 1 and 2). Such plants also appeared stunted. Similar symptoms have been described on *Eragrostis tenifolia* Hochst, and *Isachne elegans* Dalz., (Venkatkrishnaiya,



Fig. 1. Infected plant.



Fig. 2. Gray, hard & cylindrical inflorescence.

1946), *Sorghum helepense* (Linn.) Pers., *Pennisetum hohenackeri* Hochst., and *P. alopecuroides* Steud., (Govindu and Thirumalachar, 1954 and 1960), on *P. typhoides* (Burm.) Stapf. and Hubb. Variety HB-3 (Reddy and Lucy Channamma, 1976) and on *Sorghum vulgare* Pers., (Hiremath, *et al* , 1982) from Karnataka State.

Microscopic examination of infected panicles revealed the conidial state of *Balansia oryzae*. A hard, effuse greyish-black stroma occupied the entire length of the inflorescence. Sporodochia were black, slightly convex and immersed in the stro-

ma; conidia, hyaline, acicular, aseptate, slightly curved and measured  $15.0 - 22.5 \times 1.1 - 1.4 \mu\text{m}$  with an average length of  $20.2 \mu\text{m}$ .

Based on the symptoms, spore measurement comparison of Indian species of *Ephelis* reported by earlier workers (Nar-simhan and Thirumalachar, 1943; Govindu and Thirumalachar, 1954 and 1960; Mohan-ty, 1976) the fungus in question has been identified as *Ephelis oryzae* Syd.

The present finding constitutes a new host to *E. oryzae* from Karnataka.

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Nutritional Adequacy of Meals Supplied by *Khanavalis*

Nutritive value of meals depends generally on the nutrient composition of raw foods used for cooking, method of preparation and handling of the cooked foods. Studies on the nutritional status of meals in public catering institutions are very scanty. Hence, the present investigation was undertaken to assess the nutritional adequacy of meals supplied by '*Khanavalis*'

The noon meals were purchased during serving hours on three alternative days in a week and the menu pattern was recorded. The meals were pooled, homogenised, dried and used for chemical analysis (AOAC 1970). The data thus obtained from chemical analysis was subjected to statistical tests.

The nutrients provided by '*Khanavalis*' on three days are given in Table I. The mean energy content of lunch was 820 Kilo calories. Analysis of variance indicated that day to day variations observed in calories were not significant; however 't' test indicated a significant difference among  $K_1$  and  $K_2$  and  $K_2$  and  $K_3$  at 5 per cent level.  $K_1$  supplied higher calories than the other two '*Khanavalis*'. When compared to 1/3 the requirement of recommended daily allowances suggested by ICMR (1984), no significant difference was found, which indicated the provision of adequate calories by meals. Majority of the calories was provided by cereals and pulse dishes. The difference in calories among different '*Khanavalis*' may be attributed