

## SILICA CONTENT IN RICE HUSK AND ITS AVAILABILITY

**Asoka Wijeratne and Mervyn W. Thenabadu**  
(*Faculty of Agriculture, University of Sri Lanka,  
Peradeniya Campus*)

The contents of silica in the husk of several varieties of rice grown at three locations, in the Co-ordinated Rice Varietal Trials of the Research Division of the Department of Agriculture during the *Yala* season 1975, were determined.

There were differences in the silica content in husk of plants grown at Gannoruwa, Bathalagoda and Ambalantota. The values varied between 8 and 12 percent in plants from Gannoruwa and between 17 and 20 percent in plants from Ambalantota. Plants from Bathalagoda, in the Intermediate Zone, had values ranging from 11 to 14 percent.

There were no significant differences in silica content of paddy husk between varieties grown in the same location. Although the percentage of silica varied between the Wet zone and the Dry zone locations the percentage husk in the grain was not found to vary.

The solubilization of silica from rice husk treated differently was also studied in the laboratory after incubation for six weeks in a slightly acid, sandy loam paddy soil from Peradeniya. It was found that available silica from husk ash was greater than from unburnt or burnt husk. Addition of glucose to soil tended to increase availability of silica, burnt husk releasing more of the compound than the ash.

These results are discussed in relation to earlier studies.