

## SCREENING RICE VARIETIES AGAINST SALINITY

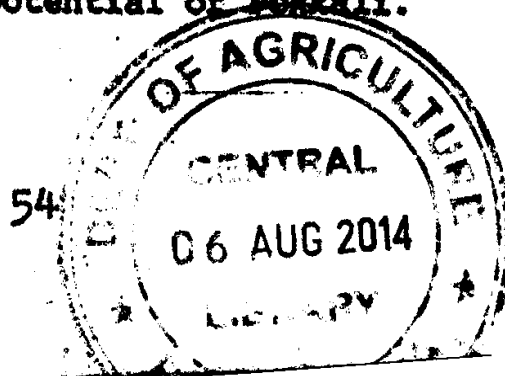
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In Sri Lanka there are Rice lands affected by coastal and/or inland salinity. In these lands, the performance of new high yielding varieties are extremely poor.

In naturally occurring saline fields, the degree of salinity is highly variable over time, and space and hence reliable information cannot be obtained through field screening of varieties. In order to overcome this problem an ill-drained plot at Batalagoda was made saline artificially. First a layer of plythene was laid about 3 feet below the soil surface to inhibit any seepage and percolation. Once the soil has settled, common salt was added until the electrical conductivity of the soil solution rose upto 8-10 mhos/cm at 25°C. Conductivity is monitored every 4 days and is maintained at the level mentioned earlier by adding salt.

Varieties recommended for cultivation and the varieties known to have tolerance to salt were screened in this field by planting 18 day old seedlings. Through repeated screenings it has been found that Pokkali (Ac.445) .SR26 and SR 26B to have a high degree of tolerance to salt. All improved varieties have been found to be very poor.

The saline field is now being used to screen segregating populations evolved with the objective of improving the yield potential of Pokkali.



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