B70 RUST AND LEAF SPOT RESISTANCE IN GROUNDNUT

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A large collection of groundnut cultivars introduced from different parts of the world were initially screened at the Regional Research Station, Angunakolapelessa and those selected for rust *Puccinia arachidis* Speg., early leaf spot (*Cercospora arachidicola Hori.*) and late leaf spot (*Cercosporidium personatum* Berk. and Curt.) resistance were further evaluated in the field at Mapalana Research Farm during Yala, 1985 and in laboratory experiments with artificial inoculation.

Seven cultivars were identified as highly resistant to rust and late leaf spot. In the replicated field experiment three of these out yielded the recommended variety MI 1 (Susceptible check) at 1% level. Another two of the resistant varieties recorded higher yield, significant at 5% level.
A detached leaf technique using a 9 point scale for scoring the intensity of leaf damage was found to be useful in screening cultivars for rust and late leaf spot resistance.

The correlations of scores in this laboratory method with field scores for rust was $r=0.6884^{**}$ and for late leaf spot $r=0.3711^{*}$. The weather conditions at Mapalana were ideal for screening for foliar disease resistance and some of the varieties identified as resistant in Angunakolapelessa and elsewhere were susceptible under these conditions.

All the resistant cultivars identified in this study require further yield improvement and also the improvement of one or several characters related to pod and kernel quality.