

B-52: Some aspects of soil moisture status in rubber growing soils

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Boralu series account for about 60% of the rubber growing soils. Soil water retention data which facilitates the estimation of available water for this series is needed for planning cultural and management practices like planting, fertilizer application etc. The water retention relationship depends mainly on soil texture,

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structure and organic matter content. The present investigation was undertaken to study the effect of some soil parameters on the water retention relationship of *Boralu* series.

This relationship was characterized for the *Boralu* series soils using samples obtained from 3 depths 0-10, 10-20 and 20-30 cm. Field capacity (FC) and Permanent Wilting Point (PWP) increased with depth and showed a positive relationship with clay content. The 0-10 cm depth showed least available water, compared to the other 3 depths. These 2 depths did not show any significant differences in available water as the increase in FC was similar to the increase in PWP.

When the pore size distribution was estimated using water retention results, all 3 depths showed aeration capacity exceeding 10% indicating the suitability of *Boralu* series soils for growing a deep rooted crop like rubber.