EFFECT OF SOIL, AGRO-CLIMATIC FACTORS ON THE YIELD OF COCONUT IN GOA

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SUMMARY

Benaulim and Calangute are the two important local cultivars of coconut grown in Goa, of which Benaulim occupies 2/3rd of the area and is also superior to Calangute in quality and in stability of yield.

Goa receives abundant rainfall (2500 to 4000 mm/annum) but the distribution of the rainfall is limited to four months from June to September. The territory experiences severe drought from January to April. Hence the yield of coconut depends on soil moisture reserves in the unirrigated gardens and on the extent of irrigation facilities in the irrigated gardens.

The total number of bearing palms and the density of palms per unit area are higher in the sandy coastal tracts as compared to the interior hilly tracts with laterite soils. The yield of coconut in the sandy and silty lowms along the coastal tracts are high (60 nuts/tree), probably due to the high water table, while the yield in interior hilly tracts

is reported to be very poor (15-20 nuts/tree). However, such low yields reported may be partly due to extensive tapping of coconut for toddy in the interior tracts. The estimated production of coconut feni (liquor) is about 3 million litres/annum. It is reported that the yield response of coconut palms to fertilizer application is significant in the coastal sandy soils while the response to irrigation is significant in the interior hilly tracts, indicating that soil moisture is the most critical limiting factor affecting productivity of coconuts in the laterite soils of the interior hill tracts. Further yield responses however depends on the fertility management and plant protection measures.