A RAPID STATUS SURVEY OF *MANILKARA HEXANDRA* (ROXB.) DUBARD IN POINT CALIMERE WILDLIFE SANCTUARY

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VI. SUMMARY

Tree community structure and regeneration status of trees in the tropical dry evergreen forest was studied to assess the status of *Manilkara hexandra*, a "keystone species" of Point Calimere Wildlife Sanctuary.

Quadrat sampling method was used to quantify the tree community. Sixty 10x10 quadrats were used for sampling the vegetation. Thirty quadrats each on sand dunes and low lying areas were sampled along six select transects.

A total of 35 tree species were encountered during the sampling. Twenty five species were observed in the low lying areas and 26 were recorded on sand dunes. Seventeen species occurred in both the habitats.

Manilkara hexandra formed the most dominant species on sand dunes and it was the second dominant species in the low lying areas. Overall, *M. hexandra* formed the dominant component of the tree strata in the tropical dry evergreen forest.

Among the four age classes recognized, matured individuals formed the maximum in both the habitats. Girth class distribution showed some gaps in 5-60 and 60-70 cm class, which is attributed to fruiting failures. Although the regeneration of *M. hexandra* appears to be poor on the sand dunes, it is doing fairly well in the low lying areas.

Two regeneration habitats, both are light penetrating areas viz., i. elevated sites comprising *Clerodendrum inerme* bushes in low lying areas and ii. thorny thickets of *Randia, Flacoutia* on the sand dunes harbour seedlings and saplings of *M. hexandra* were identified during the present study.

VII. RECOMMENDATIONS

The present study forms only a rapid survey. Hence, further detailed studies are needed to assess the fruiting seasonality, seed dispersal and natural regeneration of *Manilkara hexandra*.

As fruiting failures cause gaps in the population structure of a species, during the years of fruiting failure, intense planting should be undertaken in appropriate sites.

In the low lying areas, the exotic weed, *Prosopis juliflora* has invaded. This tree thrives well along the edges of water-logged areas which are potential *Manilkara* regeneration areas. Hence, periodic removal of *Prosopis* trees in the low lying is suggested.