

Tree health status of mixed species in urban forest of Taman Rimba Alam, Putrajaya, Malaysia

ABSTRACT

Taman Rimba Alam (TRA), Putrajaya is a metropolitan recreational park with an area of 160 ha planted with various tropical forest species. Although TRA is a man-made forest, it serves and functions as any other natural forest especially for the well-being of people in urban area. In order to ensure that TRA could functions as it has been envisaged, tree health is one of major element that needed to be monitored. In forest plantation practises, tree health usually is measured by the growth performance (using diameter or height), and mortality rate within an area planted or among species group. However, Visual Tree Assessment (VTA) method established by the International of Arboriculture (ISA) could be applied to assess tree health for mixed species of planted trees such as in TRA. In order to do that, a study was carried out to assess the tree health in TRA by using the modified VTA method. A total of 644 trees from various species and sizes in TRA were selected and inspected. Results showed that most trees are in good health, but the status of health was different based on species and size of trees. The VTA method also showed that tree defects were mostly found in the crown part due to competition for space and light. Suitable maintenance particularly thinning programme should be done periodically to maintain tree health and reduce tree defects.

Keyword: Tree health; Visual tree assessment; Urban; Planted tree