SUMMARY

Literature and field surveys identified approximately 237 species of aquatic plants in Peninsular Malaysia; 3 from Algae, 1 from Bryophyta, 17 from ferns and fern allies and the remaining 216 from flowering plants. Among the monocotyledons, families Cyperaceae and Poaceae (Gramineae), and among dicotyledons families Scrophulariaceae and Araceae, were represented with the highest numbers of aquatic species. A check list of aquatic plants in Peninsular Malaysia was prepared and is given in Appendix I.

Sixty-one species belonging to 21 families were considered socio-economically valuable and are listed in Appendix II. Data sheets containing information such as vernacular names, synonyms, ecology, geographical distribution, taxonomic description and socio-economic values of most of these plants, are given in Appendix III.

The aquatic plants most commonly used as human or animal food are: Ipomoea aquatica (water spinach), Colocasia esculenta (taro), Limnocharis flava (Yellow bur-head) and Oryza sativa (rice). Sagittaria guayanensis, Sagittaria sinensis, Ipomoea aquatica and Eichhornia crassipes (Water Hyacinth) are used as animal food mainly for pigs. About 29 aquatic species belonging to 16 families notably Acanthaceae, Araceae, Cyperaceae and Polygonaceae, have significant medicinal values. Acorus calamus (The Sweet Flag) is used to treat many diseases. There are some aquatic plants used as organic fertilizers or as green manure but none have been cultivated for these purposes. Lepironia articulata, Nipa fruticans, Pandanus helicopus, Donax arundastrum and Fimbristylis globulosa are some of the fibre plants in Peninsular Malaysia that have been used to make mats, baskets and thatching roofs.

Many aquatic plants available and considered to have potential socio-economic importance are underutilized. For example, Neptunia oleracea, Wolffia arrhiza, Eleocharis dulcis, Limnocharis flava, Ottelia alismoides and Sagittaria sinensis can be exploited or cultivated as human and animal food. A more detailed survey and economic analysis are needed to better understand the extent of the use of these plants and their nutritional values.