7 CONCLUSIONS

Studies on distribution, seasonal variation in number and growth and phenology of select weeds, in relation to associated vegetation, soil conditions and human disturbance indicate that weeds are particularly successful in disturbed habitats. However, weeds given a chance can equally invade other areas also (Wiser et al. 1998, Azeez et al. 1999). As the weedy species are aggressive and exhibit many adaptive strategies, they spread fast and may pose serious threat to certain useful elements of native flora. The usual pattern of invasion includes an initial phase of establishment, then slow spread which consists limited population in few locations, followed by a logistic growth phase enabling rapid range expansion of the population, and a final phase of limited expansion (Salisbury 1953, Mack 1981, Auld et al. 1983). The population of invaders may become stabilised in course of time, but during the process there is a risk of suppression and even elimination of many native species. The present study indicates that NBR, probably like any other similar area in the country, is facing a serious threat from invading species of plants.

The invaded areas in Nilgiri Biosphere Reserve need immediate attention to arrest further invasion and colonisation by weeds. Because of aggressiveness of weeds, it is difficult to control them by exclusively mechanical, biological or chemical method. An integrated management strategy is essential for a successful control. It is felt that emphasis need to be placed on early detection, prevention of new weeds from becoming established and elimination of
incipient invasions. Further, investigations in-to the ecology of weeds to identify species likely to invade the various communities and their possible long-term effects need to be undertaken.