

1. AGE AND AREA THEORY

Willis (1922) propounded this theory which postulates that the area of distribution of a species within comparable circles of affinity is proportionate to the period of time for which it has existed. In other words there is a direct relationship between the area of distribution and the age of the species. A species occupying a larger area must be comparatively old as compared to the one occupying a smaller area. Willis explained his theory with the help of *Coleus* species growing in Sri Lanka. However, the theory has several drawbacks, since area of distribution of a species depends upon a number of factors including the dispersal capacity of its propagules and geographic barriers surrounding the area of occurrence. Further, some dwindling species or fossil forms have persisted in the living condition in certain pockets due to continuation of favourable conditions and lack of competition which caused their decline in the past, e.g. *Ginkgo biloba*. Some recently evolved economic plants are occupying vast stretches of land in the world because of the interference by man as a dispersal agent.

2. Riddleys Theory on Endemism:

According to the view of Ridley in 1922 endemic species and the genera are the survival of the larger group of the past which are now in course of gradual extinction. According to him, the survivals are epibiotic i.e; they do not spread but remain as relics of the past in an isolated area due to some reason, as not been cover whelmed by later invading flora, these survivals are not provided with suitable and enough means of dispersion to reach another area for their establishment. Hence, they become confined to a limited area.