

---

## BIOGEOGRAPHY OF THE FAMILY MIMOSACEAE IN SRI LANKA

SN Wickramarathne and GP Ekanayake

Department of Geography, University of Peradeniya, Peradeniya

The objective of the present study was to investigate the geographical distribution of the *Mimosaceae* family in Sri Lanka. Some primary data for the study were obtained during field visits to different places, through personal communications with *Ayurvedic* doctors and residents of different geographical areas. Also incorporated were secondary data and information from several sources. The distribution of each genus and species was mapped by a GIS to show their distribution on a district basis. As the study revealed, the Family *Mimosaceae* contains 16 Genera (none of them endemic). Nine are indigenous (although they contain some exotic species); *Acacia*, *Abarema*, *Adenanthera*, *Albizia*, *Cathormion*, *Dischrostachys*, *Entada*, *Neptunia* and *Painteria*. The remaining seven genera are exotic; *Desmanthus*, *Leucaena*, *Mimosa*, *Pithecellobium*, *Prosopis*, *Samanea* and *Vachellia*.

The genera *Acacia*, *Albizia* and *Mimosa* can be considered widely occurring in all zones. *Cathormion* and *Prosopis* are confined to the arid zone. *Dischrostachys* and *Pithecellobium* are in the dry and wet zones. *Desmanthus*, *Vachellia*, *Neptunia* and *Painteria* are confined to the dry zone. *Entada*, *Leucaena*, and *Samanea* are in the dry and intermediate zones. *Abarema* and *Adenanthera* are in the intermediate and wet zones. *Acacia* is the genus having the largest number of species (19), followed by *Albizia*(6). Both *Abarema* and *Mimosa* contain three species each. *Adenanthera* and *Neptunia* have 2 species each. The remaining 10 genera have one species in each genus.

Thus, altogether there are 45 species; six endemic, 19 indigenous and 20 exotic (including, naturalized species). Out of the six endemic species five are in the wet zone. *Abarema abeywickramae*, *A. bigemina*, *Acacia lankaensis*, *Albizia lankaensis* and *Adenanthera bicolor*. One species, *Painteria nitida* is confined to the north central and eastern parts of the Dry zone. Out of the 19 indigenous species eight are *Acacia* species mainly in the arid and dry zones. There are four indigenous *Albizia* species occurring in all zones except the arid zone. Two are *Neptunia* species both in the dry zone wetlands. The remaining five are *Abarema subcoriacea* and *Adenanthera pavonina* (mid country wet zone), *Cathormion umballatum* and *Dichrostachys cinera* (dry zone) and *Entada pusaetha* in all zones except the arid zone. Of the twenty exotic species ten are *Acacias* growing in the hill country there is only one exotic *Albizia* species and it close in the mid and low country wet zone. There are *Mimosa* species one wide, one in the hill country and the third invasive (*M. pigra*). Of the remaining six, *Desmanthus virgatus*, *Pithecellobium dulce* and *Vachellia farnesiana* in the dry zone. *Leucaena leucocephala* occurs widely. *Samanea saman* is an avenue tree in dry and wet zones. *Prosopis juliflora* is invasive, although confined to the arid zone.