

Distribution of Poaceae, Chenopodiaceae, Papaveraceae and Fumariaceae plant families in Fars, Iran: an application of GIS in plant systematic and conservation

ABSTRACT

Several worldwide priority area proposals have been developed, but local considerations are necessary to identify priority areas for conservation within these regions. Then the list of plant species developed to use as conservation characteristics that complemented the Land cover data, as it is supposed that many species would be automatically conserved by protecting their associated land cover types. There is a large amount of species richness due to geological, soil and climatic variation in Fars, Iran and a majority of these species have not been identified. The species were identified using Floras, monographs and available articles. The endemic species and the regions of high species richness of these four families were reported. Results indicated that the four plant families have in total, 126 genera and 265 species, where eight species were endemic. The Poaceae family has 90 genera and 170 species; five of them are endemic. The Chenopodiaceae family has 29 genera and 76 species; two of them are endemic. The Papaveraceae family has five genera and 12 species; one species is endemic. The Fumariaceae family has two genera and seven species, without any endemic species. Ninety eight species were recorded for the first time. Overall, the Shiraz town ship has the highest species richness among all twenty townships in the province.

Keyword: Poacea; Chenopodiaceae; Papaveraceae; Fumariaceae; Species distribution