

ECOLOGICAL STUDY OF THE XEROPHYTES OF BANNU AND ITS OUTSKIRTS

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ABSTRACT

Nine plant species from the flora of Bannu district of Pakistan with continental type of climate were studied. As expected from the climate, all the species have some Xeric type of morphological and anatomical characteristics. However, it was found that one of the species, *Acacia farnesiana* is of limited distribution in Pakistan and adjoining areas of India, is of confusing nature and is exposed for further studies. *Tamarix troupitii*, *Zizyphus Maritiana* and *Saccharum spontaneum* have a very wide range of distribution extending to the interior of south-east Asia, whereas the distribution range of *Alhagi camelorum*, *Capparis decidua*, *Calotropis procera* and *Phoenix dactylifera* of course vary from one another and they are mainly distributed in the vast arid region, extending westward to western Asia. *Opuntia monacantha*, one of the exotic species from the new world fails to reproduce sexually in the prevalent environment. *Phoenix dactylifera* embodies both Xeric and amphibial characteristics and thus provides an ambiguous nature.

INTRODUCTION

Environment plays a dominant role in the distribution of various plant species and it has been observed that plants developed under somewhat similar ecological conditions have similar morphological and anatomical characteristics. This end in view, some species of Xerophytic nature were collected from Bannu and its outskirts to correlate their distribution with the environmental conditions of the Bannu basin which is as follows :

Bannu district as a whole is surrounded by mountains on all sides and is located at 70° 30' east longitude and 33° north latitude. The whole district is situated between 32° 16' north and 33° 5' north latitude and between 70° 23' East latitude and 71° 16' east latitude. Total area of the district is 1748 square miles with an extreme length of 52 miles from north to south and 34 miles from east to west.

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