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## AN INVENTORY ON DIVERSITY AND DISTRIBUTION PATTERN OF HYMENOPTERAN INSECTS IN GUJARAT, INDIA

## Bhumi Thakkar & Pragna Parikh

Department of Zoology, Faculty of Science, The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat, India

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## **ABSTRACT**

Insects are one of the most successful groups of living organisms on the earth and have one of the widest distributions around the globe. One of the reasons for their great diversity and abundance is their high reproductive capacity and adaptation in extreme environment. Hymenoptera is the third largest order of class Insecta. Biodiversity of hymenopterans insect shows various patterns in space and time due to the difference in climatic conditions, the interaction between species, geography, local history and many other factors. Hence, this present work provides a baseline data of diversity and distribution pattern of Hymenoptera in Gujarat for further study. The objectives of the study were to prepare an inventory of insects with reference to Hymenoptera. The study revealed a good assemblage of bees, wasps, and ants belonging to order Hymenoptera. A total of 145 species belonging to 20 families of Hymenoptera were reported. The study reveals that the area under the survey has hymenopteran insects belonging to 20 families, 83 genera, and 145 species and their ecological roles span from predator to crop pollinator and parasitoids. Out of the total of 145 Species recorded in Gujarat, 96 were common, 39 uncommon and 10 species were rare. During the present inventory, Formicidae family found to be most dominant followed by Apidae and Sphecidae.

KEYWORDS: Hymenoptera, Diversity, Taxonomy, Abundance, Ecological Role, Gujarat