SUMMARY
AND
CONCLUSION
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The present study is an attempt of floristic survey of ethnomedicinal plants in district Muzaffarnagar, locating between 29° 11' 30" and 29° 45' 15" N altitude and 77° 3' 45" and 78° 7' E longitude and cover about 4245 sq kms areas.

The general vegetation type of the area has been discussed with information of topographic, geology, soil, climate which influence the vegetation.

Frequent field visits were regularly conducted throughout the year to remote and interior villages. The plants were collected with the help of farmers, grazers, villagers and others local people. The information about ethnomedicinal uses, local name of plants and plant part used, formulation and preparation of recipes, dose, duration and mode of administration was sought from local healers and herbalists practising traditional system of medicine like holymen, priests, vaidyas, hakims, ojhas etc, besides village headmen, aged and knowledgeable and experienced men and women and other rural folk. The collected plants were matched and confirmed with the help of available regional and local floras and literature.

Ethnobotanical plants have been arranged alphabetically by mentioning their botanical name, synonyms (if any), families, local name, botanical description, collection no. and place of occurrence, parts used, human medicinal and veterinary uses including dose, regimen and mode of administration, other uses of plants and earlier reported uses from literature.

A total number of 275 species are recorded out of which 248 species under 195 genera and 71 families belongs to Dicotyledons and 27 species under 23 genera and 9 families belonging to Monocotyledons.

27 new uses (not found in the earlier literature on medicinal plants) are also recorded from the study area.

Other uses of ethnobotanical plants of district Muzaffarnagar also listed, which shows that about 20 species used in religious ceremonies, 14 species used for house building and agriculture implements, 14 wild species used for various edible purpose, 7 species
used for gums and resins, 3 species used for beverages and narcotics, 15 species for spices and condiments, 8 species for oil, 33 species for cosmetic and 15 species for fibres. Different ethnomedicinal uses of plants were studied, analysed and classified according to the plant part used, community, area-wise, which shows that leaves of largest number of 115 species of ethnomedicinal plants used and stamens, stigma and inflorescence are less used by the people of this area. The maximum number of 241 species used by the Hindu and minimum number of 47 used by the Christian community. Area wise maximum number of ethnomedicinal species 123 have been recorded from Morna block and minimum number of 47 species recorded from the partial Jansath. Maximum number of ethnomedicinal uses (567) was collected from the villages headmen and minimum number of uses (25) collected from Ojhas.

Ethnomedicinal plants was also categorized on the basis of their effectivity against different disorders and various ailment of different system of human body. The largest number of species (74) are used to cure cold, cough and the smallest number of species (2) used as abortifacient, anticancerous, narcotic and antituberculosis respectively.

From botanical and floristic point of view, another interesting observation of this study is the collection and identification of *Gloriosa superba* from the area which was not reported earlier from District Muzaffarnagar by Kumar (1998).

Forty seven rare or threatened plants are also listed from the study area in which *Mucuna pruriens*, *Saraca asoca*, *Helicteres isora*, *Uraria picta*, *Holerrhena antidysentrica*, *Rauvolfia serpentina*, *Gloriosa superba* and *Asparagus racemosus* are most threatened.

**CONCLUSION**

The data and analysis presented so far lead one to following conclusion:

The study revealed that in the face of rapid economic liberalization and the consequent rise in price of medicines, the people of this area manage their common health problems with herbal medicines available at hands in their vicinity.
The study also shows that wide range of ailments/diseases from cold, cough, joint diseases and gynecological complaints have effective remedies, but when the people of this area are suffer from chronic problems like Cancer, Tuberculosis and AIDS, they need to be depends on allopathic therapy.

Due to over exploitation, excessive harvesting and urbanization the production is gradually declining and the demand of medicinal plant is increasing as people become conscious with the increased potency and harmful side effect of newly isolated and synthetic compound.

The plants used in district Muzaffarnagar are essentially subsistence-oriented and it needs modern and scientific approach for sustainable development. Plants are use by the people of the area can lead to the discovery of some valuable chemical compounds of significant biological action not yet known to the world of medicine and modern allopathic treatment can also benefit immensely from it.