



MEDICINAL PLANTS OF EASTERN UTTAR PRADESH: CONVOLVULACEAE

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The paper provides an account of 12 species of family Convolvulaceae viz., *Argyria nervosa*, *Evolvulus alsinoides*, *Ipomoea obscura*, *Ipomoea aquatica*, *Ipomoea batatas*, *Ipomoea cairica*, *Ipomoea eriocarpa*, *Ipomoea carnea*, *Ipomoea nil*, *Ipomoea pestigridis*, *Ipomoea quamoclit* and *Porana paniculata* found in the Eastern Uttar Pradesh which are of medicinal use. Nomenclature, Vernacular name(s), phenological data and medicinal uses of these species are provided.

Key words: Convolvulaceae, Medicinal Plants, Eastern U.P.

Eastern Uttar Pradesh is floristically very rich. Some attempts have been made on botanical exploration of the area, but no attempt has been made to assess medicinal plants belonging to the family Convolvulaceae of this region. In view of the rich floristic diversity, lack of information on medicinal plants wealth and recent changes in geographical boundaries, present studies were undertaken to assess the diversity of the medicinal flora of the area under study.

Present communication provides data about 12 species of flowering plants belonging to the family Convolvulaceae with their accepted names, vernacular names, family/flowering fruiting period, localities and medicinal uses of the species are presented

MATERIALS AND METHODS

The systematic medico-botanical survey was carried out in different localities of Eastern U.P. during 2010-2012 for collection of information on medicinally important wild plants being used by the rural population of the areas and the plants were collected from different locations of the study area. Field work was performed in different seasons, viz pre-monsoon, monsoon and post monsoon in different local areas of Eastern Uttar Pradesh. Specimens of the constituent species were collected some of which were processed for herbarium preservation and the rest were dissected,

described and identified with the help of pertinent taxonomic literature (Haines 1921-1924, Hook. f. 1872-1897, Srivastava 1976, Srivastava *et al.* 1987, Srivastava 1993, Srivastava 2006, Siddiqui and Dixit 1975) and authentic, voucher specimens are deposited in Herbarium of Shibli National P.G. College, Azamgarh U.P.

Information regarding local names of plants and other noteworthy characters were obtained from local inhabitants.

The entire study was divided into following two parts: First part was based on the interview and discussion with the local people of the area about the uses of medicinal plants available for the treatment of different diseases.

During the survey, local people were identified for interview and discussion on the basis of following criteria.

- (a) Specialists in the field of herbal medicines.
- (b) A person who has ability to identify the medicinal plants.
- (c) A person who is resident of a village.
- (d) Vaidheas, Hakims, Ojhas, Gunias, Saperas etc and
- (e) Tribal and non-tribal.

Second part includes taxonomic identification



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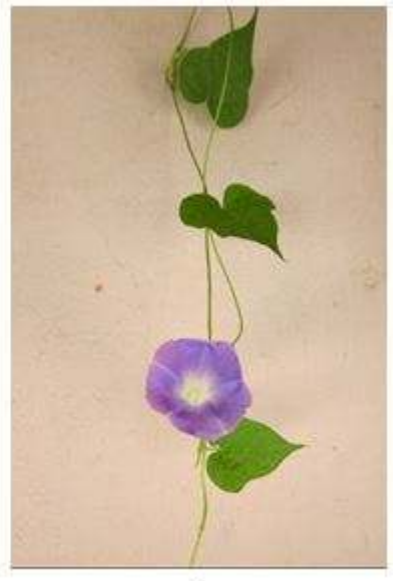
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Plate I: 1. *Evolvulus alsinoides* 2. *Ipomoea obscura* 3. *Ipomoea eriocarpa* 4. *Ipomoea quamoclit* 5. *Ipomoea cairica* 6. *Ipomoea nil* 7. *Ipomoea aquatica* 8. *Ipomoea carnea*.

Table 1: List of Cunvolvulaceous Plants medicinally used in Eastern Uttar Pradesh

SN	Botanical Name(s)	Local Names	Family	Fl/Fr.	Medicinal Uses
1.	<i>Argyria nervosa</i>	Samunder Sokh	Cunvolvulaceae	Sept./ Jan.	Used as a tonic; in dullness of intellect, emaciation, infirmity of old age and externally in abscesses; warmed leaves are tied on knee to get relief from Kneepain
2.	<i>Evolvulus alsinoides</i>	Sankhpushpi (H) Vishnugandhi (S)	Cunvolvulaceae	Jul.-Dec.	Herbs bitter, tonic, alterative, febrifuge, vermifuge anthelmintic and antiphlogistic
3.	<i>Ipomoea obscura</i>	Vachagandha (S)	Cunvolvulaceae	Sept-Feb.	Leaves used in aphthae affections after roasting and boiling in ghee; applied on sores also.
4.	<i>Ipomoea aquatica</i>	Karemau, Kalmisag (H) Swamp Cabbage (E)	Cunvolvulaceae	Sept-Feb.	Plant-juice emetic, purgative; given in piles, nervous disorder, general debility, buds used in treatment of ringworm.
5.	<i>Ipomoea batatas</i>	Shakerkandi, Mitha alu (H), Sweet Potato (E)	Cunvolvulaceae	Dec.-Jan.	Roots laxative
6.	<i>Ipomoea cairica</i>	Railway creeper (E)	Cunvolvulaceae	Oct.-May	Curshed leaves given in body rashes, Seeds purgative
7.	<i>Ipomoea eriocarpa</i>	Nakhari (S)	Cunvolvulaceae	Sept-Nov.	Plants boiled in oil and used in rheumatism, epilepsy, leprosy, and for ulcers.
8.	<i>Ipomoea carnea</i>	Beheya	Cunvolvulaceae	Most part of the year	Plants considered to be toxic, mild purgative
9.	<i>Ipomoea nil</i>	Kaladana (H) Krishnabija (S)	Cunvolvulaceae	Aug.-Nov.	Seeds purgative (Kaladana) used as substitute to Jalap (Mirabilis Jalap)
10.	<i>Ipomoea pestigridis</i>		Cunvolvulaceae	Sept.-Dec.	Roots used as antidote to snakebite, applied on ulcers, bolis.
11.	<i>Ipomoea quamoclit</i>	Dhikpachak, Ka malata (H) Cypress vine (E)	Cunvolvulaceae	Aug.-Dec.	Leaf paste in water as poultice, in bleeding piles.
12.	<i>Porana paniculata</i>	Belkamu, Safedbell (H)	Cunvolvulaceae	Nov.-Feb.	Leaves applied on sores.

H:Hindi, E:English; S: Sanskrit

of plants.

RESULTS

A total of 12 plant species were identified which are being used for the treatment of different diseases in different areas of Eastern Uttar Pradesh (Table-I); Photo Plate (I : 1-8). Authors are grateful to the Principal and Head, Department of Botany Shibli National (P.G.) College, Azamgarh for facilities.

REFERENCES

- Haines H H 1921-1924. *Botany of Bihar and Orissa*, 6 parts, London. Reprint. ed 1961.
- Hooker J D (Ed.) 1872-1897. *Flora of British India*. Vol. 1-7 L. Reeve and Co. London. Reprinted ed. 1973. Bishen Singh Mahindra Pal Singh, Dehradun and Periodic Experts, Delhi.

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Siddiqui M O and Dixit S N 1975 Some noteworthy plant species from Gorakhpur, *J. Bombay Nat. Hist. Soc.*72:620-621.

Srivastava A K 1993 Exotic Weeds of Gorakhpur district U.P., *J.Econ. Tax. Bot.* 17:261-263.

Srivastava T N 1976 *Flora Gorakhpurensis*, Today & Tomorrow's Print. & Publ. New Delhi.

Srivastava R C 2006 *Plant Resources of UP*, Oriental Enterprises, Dehradun.

Srivastava A K, Dixit S N and Singh S K 1987 Aquatic Angiosperms of Gorakhpur, *Ind. J. For.*: 10:46-51.