Botany

E-ISSN No : 2454-9916 | Volume : 12 | Issue : 10 | October 2026

MONSOON WEEDS PROFILING OF THE UPPER GANGETIC PLAINS: PHYTOTHERAPEUTIC EVALUATION OF RAINY SEASON HERBS IN SHAHJAHANPUR DISTRICT, UTTAR PRADESH

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ABSTRACT

The wealthy range of vegetation in India, especially in phrases of natural plants, is nicely identified across the country for the duration of all seasons. However, conducting a complete find out about and survey of all vegetation in a single area provides considerable challenges. Therefore, this survey has been prepared district-wise and season-wise, focusing on the Shajahanpur district of Uttar Pradesh. The learn about is localized, relying heavily on the expertise of nearby residents related to seasonal herbs. Additionally, we have collaborated with neighborhood practitioners of natural medication to collect data and acquire plant specimens. The facts have been compiled via my very own observations and insights from neighborhood people educated about flora with ethno medicinal applications. During the rainy weather season, mainly from July to September, we amassed substances from about 38 frequent ethno medicinal plants. The genera we have utilized over the year encompass *Abutilon indicum* Sweet, *Achyranthes aspera* Linn., *Alysicarpus monilifer* (Linn.) DC., *Anisomeles indica* (Linn.) Kuntze, *Bacopa monnieri* (Linn.) Penn., *Biophytum sensivitum* (Linn.) DC., *Boerhavia diffusa* Linn., *Cannabis sativa* Linn., *Cassia obtusifolia* Linn., *Cassia tora* Linn., *Centella asiatica* (Linn.) Urb., *Cleome gynandra* Linn., *Cleome viscosa* Linn., *Commelina benghalensis* Linn., *Corchorus capsularis* Linn., *Crotalaria medicagenea* Lamk., *Croton bonplandianum* Baill., *Desmodium gangeticum* DC., *Gloriosa superba* Linn., *Leucas asper* (Willd.) Link., *Polygala arvensis* Willd., *Cyperus compressus* Linn., *Cyperus difformis* Linn., *Cyperus iria* Linn., *Cyperus kyllingia* Endl., *Cyperus rotundus* Linn. *Fimbristylis miliacea* Vahl. *Coix lachrymajobi* Linn., *Echinocloa colonum* (Linn.) Link. and *Eragrostris tenella* (Linn.) Beauv, most common amongst others.

KEYWORDS: Ethno-Botanical Plants, Phytotherapeutic Plants, Rainy Season Herbs, Shajahanpur District Uttar Pradesh

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How to Cite:
Shazia Bi (2026), Monsoon Weeds Profiling of the Upper Gangetic Plains: Phytotherapeutic Evaluation of Rainy Season Herbs in Shahjahanpur District, Uttar Pradesh, International Education & Research Journal (IERJ), Vol: 12, Issue: 10, 183-189

INTRODUCTION

In Shahjahanpur district by the middle of June, changes occur in the weather phenomenon. Due to excessive heat in summer months, a low-pressure area develops in the northwestern India and by the middle of June it brings a complete reversal in the air movements. The atmospheric pressure continues to decrease till the first week of June when it is lowest and the winds start to move from sea towards land. With the arrival of humid oceanic currents in July to August, the mean temperature goes down up to 32.9°C in July. The relative humidity increases from 38.9% to 87.3% during June, July, and August. The rainy season is characterized by overcast sky having an average cloud cover about seven tenth in July which rarely exceeds two tenth during the summer months

The time of the onset and retreat of monsoons varies from year to year. Generally, the rains set in by the end of June or by the first week of July and continue till the end of September or by the first of October. July and August

Research Article

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are the rainy months and having average rainfall varying from 157.05mm in 2025, and 235mm in 2026 respectively but in September there is a marked decrease in rainfall. The average rainfall during September of 2025 and 2026 and is 75.48mm. The incidence of rainfall is not continuous throughout the season but it takes place in brief spells of cloud burst and usually two to three days of continuous rain. Here we collect and study about 38 plant species mainly in herbs in rainy season between 2025 to 2026 and the study based on survey year wise reporting the field and vegetation specially belongs to herbs of season, Climbers and the grasses in monsoon.

MATERIALS AND METHODS

This includes the collection of plants with ethnobotanical data, if any, and related notes, tagging and pressing the specimens on the spot, if possible.

To ensure the extensive coverage of the area, the headquarter of each pargana was designated as center point. In first year, the area lying within a radius of 5 km from each centre was combat. In second year, the area of operation was extended as far as 20 km. the tour programs were so framed as to visit each locality at-least once in 15 days. Shajahanpur and shut via place of district Uttar Pradesh have annual and frequent rainfall of the 1025 mm and the soil is fertile alluvial and sandy to clayey loamy in general. The herbal vegetation of this place in distinctive habitats such as orchard lands wooded location land, agricultural land, crop lands, shut to the avenue side, shut to the house, constructions, or Factories, from someplace of herbs had been positioned and identified. During the examined about the place work, close by as well as regional names with the help of close by practitioners of natural treatment and even the medicinal vegetation have been moreover recorded side-by-side, discussing with the close by peoples, more often than not belonging to rural areas whose have the expertise of climbers and grasses also of the plant existence of their areas. The current study, in which Indian herbs for their cautioned natural matters to do in herbal device for future study purpose. Round the year

RESULT AND DISCUSSION

During our study, we gather and recognized a whole numbers of 38 species belonging to distinct location of districts Shajahanpur have been recorded. This is definitely enlisted in listed below.Which describes botanical names, regional names, plant components used and uses if found makes use of all recognized herbals flora of the region? The a number components of the vegetation have been used as a supply of drug treatments via man from historical to present day technology (Bisht and Badoni, 2009; Mehra et al., 2014; Kumaran and Citarasu, 2021; Turye et al., 2015; Bajpai et al., 2016) are additionally having miracleulous values of analgesics properties. Plant species belonging to extraordinary genera and households have been used with the aid of most of the neighborhood peoples for the therapy of frequent illnesses (Maliya, 2004; Singh et al., 2002; Mohd, 2012; Nigam et al., 2013 and Verma et al., 2007.With the increase of bloodless climate most of the wet season herbs with makes use of succeeded with the aid of plant life by plants like common monsoon herbs are: *Abutilon indicum* Sweet, *Achyranthes aspera* Linn., *Alysicarpus monilifer* (Linn.) DC., *Anisomeles indica* (Linn.) Kuntze, *Bacopa monnieri* (Linn.) Penn., *Biophytum sensivitum* (Linn.) DC., *Boerhavia diffusa* Linn., *Cannabis sativa* Linn., *Cassia obtusifolia* Linn., *Cassia tora* Linn., *Centella asiatica* (Linn.) Urb., *Cleome gynandra* Linn., *Cleome viscosa* Linn., *Commelina benghalensis* Linn., *Corchorus capsularis* Linn., *Crotalaria medicagenea* Lamk., *Croton bonplandianum* Baill., *Desmodium gangeticum* DC., *Gloriosa superba* Linn., *Leucas asper* (Willd.) Link., *Polygala arvensis* Willd., *Trianthema portulacastrum* Linn., *Tribulus terrestris* Linn. and *Urena lobata* Linn. *Parthenium hysterophorus* Linn.

The common sedges and grasses recorded during this period are: *Bulbostylis barbata* (Rottb.) Clarke, *Cyperus compressus* Linn., *Cyperus difformis* Linn., *Cyperus iria* Linn., *Cyperus kyllingia* Endl., *Cyperus rotundus* Linn. *Fimbristylis miliacea* Vahl. *Coix lachrymajobi* Linn., *Echinocloa colonum (Linn.) Link. and Eragrostris tenella* (Linn.) Beauv.

The climbers and twinners which occur during this period are: *Clitoria ternatea* Linn., *Ipomoea pesti – gridis* Linn., *Mukia maderspatana (Linn.) M. Roem.* and *Rhynchosia minima* DC.

These plants listed below in table-

Rainy seasons plants and their Ethno botanical uses with common name and flowering and fruiting months of related plants table:

S. N.	The most common herbs found in monsoon season are:	Locality	Ethnobotanical uses	Flowering & Fruiting	Local Name
1	*Abutilon indicum* Sweet,	Abundant, found practically in every nook and corner of the area but prefers moist and shady localities.	The leaves are useful as a demulcent their decoction is given in diarrhoea, gonorrhoea, bronchitis, inflammation of bladde. Chest affection, uretherites and fever. The bark as well as roots are diuretic.	Round the year	Kanghi
2	*Achyranthes aspera* Linn.,	Road side	Use for piles, fistula, abdominal pain, and fresh leaves good for wound healing.	Flowering**:** July-September; Fruiting**:** September-October.	Latjira or chirchita
3	*Alysicarpus monilifer* (Linn.) DC.,	Commonly found in grass land and roadside	its decoction is given in Skin wounds kidney and urinary health, blennorrhoea, gleet, vascular calculus and skin diseases.	Flowering**:** July-September; Fruiting**:** September-October.	Money worts
4	*Anisomeles indica* (Linn.) Kuntze,	Common, grows gregariously along the 'Pagdandis' (earthen roads).	The plant is used as digestive respiratory and inflammatory condition and also use for snake bite	Round the years.	Kala Bhangra
5	*Bacopa monnieri* (Linn.) Penn.,	Common, waste places road sides, forest edges. Usually, it grows creeper aquatic nature	Its use in ADHD support, stress neuro protection aging and sleep disorder	Common, grows gregariously along the 'Pagdandis' (earthen roads).	Brahmi
6	*Biophytum sensivitum* (Linn.) DC.,	Abundant. In grass lands and orchards, on road sides and waste lands.	Plant is used in respiratory, diabetes, wound healing and digestives issues	January-April.	Mukkutti
7	*Boerhavia diffusa* Linn.,	Road side.	Ophthalmic, blood sugar, anti inflammatory, anaemia, metabolic, respiratory, liver and kidney support	November to February	Punarva
8.	*Cannabis sativa* Linn.,	Common, often found on fallow lands and road sides.	Decoction of leaves and flowers are use in pain reliever, neuro, gastrointestinal as food and fiber and paper industry.	Flowering: August-December; Fruiting: October-December.	Marijuana, Indian hemp
9	*Cassia obtusifolia* Linn.,	Raid side very common	Use fir Eyes tonic liver tonic, skin condition anti-fungal, anti parasitic laxative. It is also used in metabolic core.	**Flowering:**December – February; **Fruitig:**March – April.	Senna
10.	*Cassia tora* Linn.,	Road side fields.	Use fir Eyes tonic liver tonic, skin condition anti-fungal, anti parasitic laxative. It is also used as anti inflammatory and analgesic.	December-April.	Sickle senna

11	*Centella asiatica* (Linn.) Urb.,	Abundant on the borders of agricultural fields.	Uses as Culinary, brain health, skin problem, wound healing, circulation, and veins	November-April	Tiger grass
12	*Cleome gynandra* Linn.,	A common weed growing in a variety of soils and situations.	Eye and ear ailment, snake bite, fever, skin irritation, help promote labour in pregnancy, headache, respiratory.	November-Late April	Hur hur
13.	*Cleome viscosa*Linn.,	A very common weed within the area.	skin diseases, piles, fever, gonorrhoea, inflammatory swellings, and lever complaints. Also, anti microbial, antiseptic, carminative, anti diarrhoea, pain, fever, and anti pyretic uses	Throughout the year.	Hur hur or dog mustard
14	*Commelina benghalensis* Linn.,	Abundant in road and fields.	Sore throats, fever, leprosarium, snake bite, female infertility, and jaundice.	Rainy transitional season.	Bengal day flower
15	*Corchorus capsularis* Linn.,	Along side roads	Cardio tonic, Nutritive, urinary track health, fever, anti inflammatory and pain reliever use.	Rainy season	jute
16	*Crotalaria medicagenea* Lamk.,	Along road sides	Use as anti inflation, cardiovascular disorder, and diabetes mellitus.	September to November	Ranmethi
17	*Croton bonplandianum* Baill.,	Along road sides	Leaves and latex use in skin burn, cuts, lesions. Roots and bark have purgative and antivanum properties. Seeds abdominal dropsy, acute constipation and jaundice. Fresh plants juice use for headache	August to October	Bon tulsi
18	*Desmodium gangeticum* DC.,	Near roadside	Asthma care, making dashmula or dush mularisht in Ayurveda and have analgesic anti-inflammatory properties also use as fever tonic.	Rainfall season	Salparni
19	*Gloriosa superba* Linn.,	Abundant. In grass lands and orchards, on roadsides and waste lands	This has uterine and reproductive effect it is an abortifacient ant to disturbs contractile movement also use in animal and snake biting	Around the year	Agnishikha
20	*Leucas asper* (Willd.) Link.,	Grass lands and orchards, on roadsides and waste lands	Used as insecticide, parasitic, fever cold and skin conditions	August to February	Chota halkusa
21	*Polygala arvensis* Willd.,	Not common, found in grassy localities.	Jaundice treatment, the aqueous extract used for lactation, skin treatment, wound healing, and liver protection.	Flowering: August – September; fruiting October – November.	Sanjeevani
22	*Trianthema portulacastrum* Linn.,	Common in waste land	Poultice of leaf for pain reliever, stomachic, diuretic, laxative, rheumatism, amenorrhea, blindness, and asthma treatment.	September to November	Bishkhapra
23	*Tribulus terrestris* Linn.	Roadside grassy localise and waste land	Kidney relief, UTI relief, sexual health PCOS treatment li Ido enhancement, and used in erectile disruption in males.	August to November	Gokhru
24	*Urena lobata* Linn.	Quite common in wastelands, roadsides and among hedges.	Root, leaves, bark, seeds, and flower uses din rheumatism, vowel, colic, malaria, leucorrhea, gonorrhoeal, cough and skin treatment.	July – November; October – January.	Lapetua

25	*Parthenium hysterophorus* Linn.	Road sides waste lands	Used in muscles relief, dermatitis, skin infections and also have anti-cancerous property	July to December	Congress grass or carrot grass
The common sedges and grasses recorded during this period are:					
26	*Bulbostylis barbata* (Rottb.) Clarke,	Waste lands	Decoration of whole plants used in diarrhoea, general intestinal disorder, and dysentery.	September to November	Bara- nagar-motha
27	*Cyperus compressus* Linn.,	Waste lands	Used for raw material of essential oil, food at the time of scarcity, anti parasitic, antibiotic properties, soil erosion and animal feeds	Round the year	Mothi
28	*Cyperus difformis* Linn.,	Specially in aquatic area	It's a survival food used as anti-cancerous, antioxidant and antibacterial.	Round the years in wetlands	Small flower umbrella sedge
29	*Cyperus iria* Linn.,	Road sides and waste lands	Used in menstrual irregularities such as amenorrhea, plant juice treats fever, tonic and stimulant.	July to December	Rice flats sedge
30	*Cyperus kyllingia* Endl.,	Waste lands	Used in dry fever, fever, hepatic, and diabetes.	August to November	White head spike sedge
	Cyperus rotundus Linn.	Road side waste lands	Used as menstrual relief, hormonal balance, metabolic support, blood purifier Carnegie, and gastrointestinal Problems.	July to November	Nut grass
31	*Fimbristylis miliacea* Vahl.	Road side waste lands	Traditionally use as politics in fever	August to November	Dilli
32	*Coix lachrymajobi* Linn.,	Waste lands road sides grounds	Used as substitute of rice and menstrual disorder, obesity, nausea, and vomiting	August to November	Chines pearl barley
33	*Echinocloa colonum* (Linn.) Link.	Forest and grassy area	It has antitoxin property and minor ailment treatment	August to December	Jungle rice
34	*Eragrostris tenella* (Linn.) Beauv.	Road sides waste land and Grasslands	It has been used in protective or neutralising medicine	July to November	Chidhi ghar
The climbers and twinners which occur during this period are:					
35	*Clitoria ternatea* Linn.,	Forest and grassy lands	It is a brain tonic and natural dye also use in healing and metabolism. It's also nitrogen fixing cover crop.	August to November	Clumping wine or blue pea
36	*Ipomoea pesti – gridis* Linn.,	Grassy lands common in roadsides area	Leaf extract soothing joints pain, bites antidote, smock of low quantity use for asthma, skin problems, and pain inflammation.	September to November	Tiger foot morning glory
37	*Mukia maderspatana* (Linn.) M. Roem.	Grassy lands common in roadsides area	Use for asthma, gastrointestinal, cardiovascular support and anti pyretic.	September to November	Bilari
38	*Rhynchosia minima* DC	Grassy lands common in forest and roadsides	Used as laxative, abortifacient, dysentery, diarrhoea, haemorrhoids, respiratory infections, and boils	September to December	Kulthi

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