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Supplementary Tables

Table 1. Weeds with scientific name, family name, distribution and allelopathic effect.

Sl.	Plant name/ Family	Local name	Habit and distribution	Allalamathic affact	References
No.				Allelopathic effect	
1.	Abelmoschus moschatus. Medik. (Malvaceae)	Bana bhendi	Wasteland	Minor effect on germination rate, growth and production of leguminous crops	32
2.	Abutilon indicum (L.) (Malvaceae)	Pedipedika	Crop and non-cropped area	Inhibitory potential on growth of wheat and rice	33
3.	Acalypha indica. L. (Euphorbiaceae)	Indra Marisha	Garden, waste places	Major effect on rice and maize	34
4.	Acanthospermum hispidum DC. (Asteraceae)	Kanta gokhru	Cultivated upland crops, roadsides, waste places	No effect	-
5.	Achyranthes aspera L. (Amaranthaceae)	Apamaranga	Waste places	Inhibitory effect on different weeds	35
6.	Aeschynomene indica L. (Fabaceae)	Sola	Wetland areas, canal banks	No negative effect	-
7.	Ageratum conyzoides L. (Asteraceae)	Poka sungha	Waste places, roadsides, field crops	Negative effect on agricultural crops	34
8.	Alternanthera sessilis (L.) R. Br. (Amaranthaceae)	Madaranga	Moist and fertile soils, paddy field	Effect on growth of crops, potatoes	36
9.	Amaranthus spinosus L. (Amaranthaceae)	Kanta leutia	Waste places and roadsides	No negative effect	-
10.	Amaranthus viridis L. (Amaranthaceae)	Leutia saga	Dryland field crops, plantation crops	Effect on root and shoot growth of Poaceous crops	37
11.	Ammannia baccifera L. (Lythraceae)	Bana maricha	Found in wet environments, frequently seen in rice and other Kharif crops	Effect on the rice field and production rate of rice	38

12.	Argemone mexicana L.	Kanta kusuma	Roadsides, cultivated		39
	(Papavaraceae)		fields	Effect on growth of grasses	
13.	Asphodelus tenuifolius Cav	Jangali piaja	Field of wheat, peas,		40
	(Liliaceae)		potatoes, mustard, and cotton	Effect on chickpea, wheat germination rate	
14.	Bacopa monnieri (L.) Penn. (Scrophulariaceae)	Brahmi	Moist habitats	No negative effect	-
15.	Barleria prionitis L. (Acanthaceae)	Kanta Malati	Wastelands and roadsides	No negative effect	-
	<i>Bidens pilosa</i> L. (Asteraceae)	Poka sungha	Dryland field crops	Effect on weeds found in rice field	41
	Blumea lacera (Burm.f.) DC. (Asteraceae)	Kukura sunga	Common along rice fields	Effect on rice growth and common Kharif weeds of agricultural fields	35
	Cassytha filiformis L. (Lauraceae)	Nirmuli	Grows on other plants	Effect on growth and germination of both cultivated and non-cultivated crops	42
19.	Calotropis gigantea (L.) R. Br. (Asclepiadaceae)	Arakha	Dry waste places and roadsides	Effect on cabbage production yield and size of cabbage	34
20.	Commelina difusa Burm.f. (Commelinaceae)	Kansiri	Irrigated cultivated fields	No negative effect	-
	Centella asiatica (L.) Urb. (Apiaceae)	Pasharuni	Ditches and low wet areas	No negative effect	-
22.	Colocasia esculenta (L.) Schott. (Alismataceae)	Saru	Wet areas	Effect on rate of sorghum production	38
23.	Croton sparsiflorus Morong (Euphorbiaceae)	Nandababuli	Grows on roadside	No major effect	40
24.	Cuscuta reflexa Roxb. (Convolvulaceae)	Nirmuli lata	Total parasite on some crops, as well as roadside trees and forest	Effect on growth and germination of crops, trees	31
25.	Chrysopogon aciculatus (Retz.) (Poaceae)	Guguchia	Grows everywhere	Negative effect on other weeds	37
26.	Commelina benghalensis L. (Commelinaceae)	Kansiri	Irrigated cultivated fields	Effect on production of crops	33

27.	Cynodon dactylon. (L) (Poaceae)	Duba ghasa	Grows everywhere	No negative effect	-
28.	Cyperus rotundus L. (Cyperaceae)	Matha ghasa	Irrigated cultivated fields	No negative effect	-
29.	Caesalpinia bonduc (L.) Roxb. (Fabaceae)	Gilo	Wastelands and roadsides	No major effect on other plants	36
30.	Datura stramonium. L. (Solanaceae)	Dudura	Common in unused areas, gardens, and along roads and railway tracks	Negative effect on nearby plants	40
31.	Datura metel L. (Solanaceae)	Kaladudura	Unused places, gardens, roadside	Effect on the growth and development of nearby plants	42
32.	Diplocyclos palmatus L. (Cucurbitaceae)	Sibalingi	Found commonly on bushes and hedges	No negative effect on other plants	-
33.	Eclipta prostrata (L.) L. (Asteraceae)	Bhrungaraj	Common in moist areas like tank beds, wastelands, and cultivated fields with abundant moisture	No negative effect on the nearby plant population	-
34.	Emilia sonchifolia (L.) DC (Asteraceae)	Sarkara	Wastelands and roadsides	Inhibitory effect on the growth of other crops	36
35.	Euphorbia hirta L. (Euphorbiaceae)	Chitakuti	Cultivated fields, wastelands and roadsides	Effect on production yield of legumes	39
36.	Euphorbia thymifolia L. (Euphorbiaceae)	Patra siju	Wastelands and roadsides	Effect on germination of vegetables and their production quantity	41
37.	Eichhornia crassipes (Mart.) Solms (Pontederiaceae)	Bilati dala	Wet areas	Effects on microbes, including phytoplankton	33
38.	Echinochloa colona (L.) Link (Poaceae)	Suan ghasa	Irrigated cultivated fields	Negative effect and germination rate of rice and soyabean	34
39.	Glinus oppositifolius (L.) A.DC. (Molluginaceae)	Pita saga	Irrigated cultivated fields	No negative effect on other plant species	-
40.	Gloriosa superba L. (Colchicaceae)	Agni sikha	Wastelands, roadsides during rainy season	Negative effect on growth and production rate of other crops	39

41.	Heliotropium indicum L. (Boraginaceae)	Hati sundha	Wastelands, roadsides during rainy season	No negative effect on any other plant	-
42.	<i>Hydrilla verticillata</i> (L.f.) Royle. (Hydrocharitaceae)	(Chingudia dala)	Pond, river	Effect on microbes, phytoplankton	35
43.	Imperata cylindrica. L. (Poaceae)	Chhana ghasa	Wastelands and infertile soils in warmer regions	No allelopathic effect on other plants	-
44.	<i>Jatropha gossypiifolia</i> L. (Euphorbiaceae)	Baigaba	Wastelands, roadside	Negative effect on all nearby plants	43
45.	Lantana camara. L. (Verbenaceae)	Gandha gauria	Wastelands, roadsides and rocky areas	Inhibitory effect on agricultural crops	44
46.	Luffa acutangula (L.) Roxb (Cucurbitaceae)	Pita taradi	The area has moist soil, with full sun and well-drained conditions	No negative effect on nearby plant species	-
47.	Leucas aspera (Wild) Spreng. (Lamiaceae)	Bhuta mari	Cultivated fields and wastelands	Inhibitory effect on the growth of nearby herbs	37
48.	Mikania micrantha Kunth (Asteraceae)	Japani lata		Negative effect on seed germination and growth of legumes	42
49.	Mimosa pudica L. (Mimosaceae)	Lajakuli lata	Wastelands, roadsides and other open places	Effect on production yield of crops	33
50.	Ottelia alismoides (L.) Pers. (Hydrocharitaceae)	Panikundri	Aquatic habitats	Effect on other aquatic plants	38
51.	Oryza rufipogon Griff. (Poaceae)	Balunga	Cultivated fields	Inhibitory effect rate of the production rate of rice	44
52.	Oxalis corniculata L. (Oxalidaceae)	Ambiliti	Cultivated fields, gardens, and waste places	No major effect on other plant community	-
53.	Phyllanthus niruri L. (Euphorbiaceae)	Bhuin anla	Cultivated fields, gardens and waste places during the rainy season	Negative effect on seedling growth and rate of production of rice	35
54.	Portulaca oleracea L. (Portulacaceae)	Puruni saga	Irrigated cultivated fields, plantation crops, waste places	Inhibitory effect on other weeds	40
55.	Pandanus fascicularis Lam. (Pandanaceae)	Kia	Roadsides, wastelands	Major negative effect on the growth of nearby plants	39

56.	Solanum surrattens Burm.f. (Solanaceae)	Beji-baigana	Roadsides and wastelands	No negative effect	-
57.	Sida acuta Burm. F. (Malvaceae)	Suna khadika	Pastures, lawns, wastelands	Effect on growth and germination of other weeds	43
58.	Sphaeranthus indicus L. (Asteraceae)	Bhuin kadamba	Roadsides and wastelands	Effect on the production rate of legumes	31
59.	Tridax procumbens L. (Asteraceae)	Bisalya karani	Fields, wastelands, roadside, river plains, and hilly terrain	Negative effect on the germination rate of pulses	38
60.	Trichosanthes tricuspidata Lour. (Cucurbitaceae)	Mahakal	Cultivated fields, wastelands, roadsides	Effect on production yield of vegetables	33
61.	<i>Tragia involucrata</i> L. (Euphorbiaceae)	Bichhuati	Wastelands, roadsides	Effect on nearby crops and other weeds	42
62.	Trichosanthes cucumerina L. (Cucurbitaceae)	Bana potala	Wastelands, roadsides and other open places	Negative effect on other weeds	35
63.	Vetiveria zizanioides (L.) Nash. (Poaceae)	Bena	Wastelands, roadsides, river plains	Inhibitory effect on the growth of nearby crops	34

Table 2. Weeds with scientific names, local uses, parts used for medicine preparation and medicinal uses

Sl. No.	Plant name	Local uses	Parts used for the	Medicinal uses	
			preparation of		References
			medicine		
1.	Abelmoschus moschatus. Medik.	Flower is sometimes added to tobacco to enhance its flavour.	Entire plant, seed	Bronchitis treatment typically involves rubbing the chest with a pulp from the entire plant. Insects can be driven away using seeds.	45

2.	Abutilon indicum (L.)		Whole plant, leaves and roots	Diabetes, piles, worms, fever and cough can be treated with a root powder. Urinary issues as an anthelmintic, the plant is used in its whole. Leaves are fried and eaten in case of bleeding piles.	46
3.	Acalypha indica. L.	It is consumed primarily as a vegetable.	Root, leaves and whole plant	Scabies treatment with leaves and table salt. Rheumatoid arthritis is treated with a combination of the leaf juice and oil.	47
4.	Acanthospermum hispidum DC.	-	leaves	The leaves are used to treat fever and several skin disorders. Essential oils, found in leaves, have antimicrobial and antifungal effects.	48
5.	Achyranthes aspera L.		Leaves, roots, whole plant and seed	Kidney stones, coughs, and pneumonia are all amenable to the whole plant's therapeutic effects. To counteract the effects of a crazy dog bite, we can take tablets made from herb paste with <i>Piper longum</i> fruits.	49
6.	Aeschynomene indica L.	Fed to livestock or other animals. The buoyant stems are put to use in things like fishing net floats.	Whole plant	The plant's extract treats urinary tract infections and aid in wound healing.	50
7.	Ageratum conyzoides L.	-	Leaves, roots, flowers and seeds	Blood coagulants made from fresh leaf extract speed up wound healing. To treat skin conditions, leaf and stem extract is used. Leaf juice boiled with oil applied externally for rheumatism.	51
8.	Alternanthera sessilis (L.) R. Br.	People can eat the leaves and tender new shoots. Plants that are used for decoration.	Leaves, shoots and whole plant	This diet is beneficial because it increases milk production, which is then used to correct blindness at night. Iron and protein can be	52

9.	Amaranthus spinosus L.	Its ashes are used to colour fabric a muted grey. It's a staple food item throughout the world.	Root and leaf	found in abundance in tender new growth. The powdered root is used to treat gonorrhoea. Useful in treating eczema. Boils and burns can be treated with a paste made from roots and leaves.	53
10.	Amaranthus viridis L.	Consumed in several cultures as a leafy vegetable or cooked as a green	Whole plant	Fed to animals as a feed. For treating iron deficiency, the leaves are employed.	54
11.	Ammannia baccifera L.	-	Leaves and whole plant	Ringworm and other skin conditions can be treated using leaves. Fever is treated using a decoction of the plant, either fresh or dried, together with ginger and Cyperus root.	55
12.	Argemone mexicana L.	During India's vibrant Holika Dahan celebration, adults and children worship by presenting floral offerings to the goddess Holika.	Root, seeds and milky juice of the fresh plant	The plant has a yellow liquid that treats cutaneous diseases, dropsy, and jaundice. It is also used in Ayurveda for eye conditions. It purifies the blood in the Unani system. Ulcers and other skin conditions are treated with seed oils.	56
13.	Asphodelus tenuifolius Cav	-	Leaves	Kidney stones are treated with a decoction of the leaves. On swellings, leaf paste is applied.	57
14.	Bacopa monnieri (L.) Penn.	Given to kids as a way to boost their brainpower and memory	Whole plant, leaves and seeds	Improves intelligence and memory while also revitalizing sensory organs. It aids in the elimination of poisonous affections, spleen disorders, and blood impurity.	55
15.	Barleria prionitis L.	-	Leaves and root	Leaves chewed to relieve toothache. Dried bark is given for	56

16.	Bidens pilosa L.	_	Root, leaves, flowers and seeds	whooping cough. The juice of the leaves is applied to feet during the rainy season to prevent their cracking. Leaves and seeds are recommended for horses with parasites in their intestines. Eye and ear problems are treated with juice. Flowers can help with diarrhoea.	58
17.	Blumea lacera (Burm.f.) DC.	-	Root and leaves	An anthelmintic is made from the juice of the leaves. Cholera patients are given roots with black pepper. The root is said to cure mouth disease if kept in the mouth.	59
18.	Cassytha filiformis L.	The locals grind the entire plant into a paste and use it to make paper.	Stem	The stems are used as a tonic infusion for piles and diarrhoea in China, India, and Vietnam. Externally, the stems are used to clean ulcers.	60
19.	Calotropis gigantea (L.) R. Br.	The aqueous extract is popular for its use in repelling mosquitoes.	Root bark, milky juice and whole plant	The whole plant is used for smallpox, leg and chest pain, skin diseases, muscular pain, joint pain, tongue paralysis, piles, worms, post-natal complaints, scabies, syphilis, cholera, dysentery, pneumonia, and dog or jackal bite, rabies. The milky juice is recommended for scalp ringworms and to destroy piles.	61
20.	Commelina difusa Burm.f.	-	Leaves, whole plant	Leaves are used to heal swelling. Plants have also been used in fever, malaria, bug bites and bladder infections.	52

21.	Centella asiatica (L.) Urb.	Eaten as a green vegetable	Leaves	Leaves are used to heal wounds, improve mental clarity and treat skin conditions such as leprosy and psoriasis.	48
22.	Colocasia esculenta (L.) Schott.	Used as a vegetable in food.	Stem	Stems treat asthma, arthritis, diarrhoea, neurological, and skin disorders.	45
23.	Croton sparsiflorus Morong	Used for animal feed	Seeds	Seeds treat constipation, diabetes, digestive problems, and dysentery.	50
24.	Cuscuta reflexa Roxb.	-	Above ground parts, seeds	Externally, the plant is used to treat itch and flatulence. Seed powders are used as a diaphoretic, demulcent, and tonic.	46
25.	Chrysopogon aciculatus (Retz.)	-	Root	Snake bites are treated with a decoction of root. Roundworms in the intestine are expelled using seeds.	57
26.	Commelina benghalensis L.	Utilized both as animal feed and as a human food source	Leaves	Leaf paste is used to treat conditions such as leprosy, sore throat, ophthalmia, burns, pain, and inflammation.	59
27.	Cynodon dactylon. (L)	Considered important in the worship of God.	Whole plant, roots and pollen	Plant extract mixed with garlic and warm mustard oil is applied to the skin to relieve body pains. The entire plant can help with coughing. Leaf paste is used to stop bleeding from cuts and wounds. Pollen extract is used to treat asthma.	55
28.	Cyperus rotundus L.	-	Whole plant, tubers and root	At home, root powder treats various clinical conditions such as diarrhoea, diabetes, pyresis, inflammation, malaria, and stomach and bowel disorders. The	51

29.	Caesalpinia bonduc (L.) Roxb.	Kids enjoy playing with the seeds.	Seed	decoction is given three times a day to cure malarial fever. For many years, seed powder has been used in India to treat fever, inflammation, diabetes, cardiovascular disease, cancer, and also for birth control.	56
30.	Datura stramonium. L.	Considered important in the worship of lord Shiva.	Leaves, fruit and seeds	In gonorrhoea, leaf juice is taken internally with milk. It is also a popular treatment for hydrophobia. Toothache is relieved by grinding seeds into pills and placing them on decayed teeth. Earache is treated with powdered seeds mixed with warm mustard oil. For the treatment of partial paralysis, crushed seeds (very little) mixed with rice flour and prepared cake.	53
31.	Datura metel L.	Considered important in the worship of lord Shiva.	Seed, fruit	This seed medication is used to treat stomach and intestinal pain. The fruit juice is applied to the scalp to treat dandruff and hair loss.	49
32.	Diplocyclos palmatus L.	Fed to livestock	Whole plant, root, seeds	The whole plant treats headaches, enlarged spleens, stomach swelling, and tumours. The plant can also be used to treat snakebite. Leaves are applied externally to inflammation. Root and seed powder is given to help conception in women.	55
33.	Eclipta prostrata (L.) L.	Use as a hair oil, preferably with coconut oil.	Leaves, roots and whole plant	Juice is used to treat diarrhoea, throat pain, and fever. When combined with oil, it relieves	54

34.	Emilia sonchifolia (L.) DC	Both raw and cooked, the leaves and young shoots of the plant can be enjoyed by human palates.	Root, leaves and whole plant	headaches. To treat white spots caused by burning, leaf paste is applied. The herb's oil is well-known as a hair dye and has a cooling effect on the brain. Leaf juice is used to treat inflammation of the eyes and night blindness. Diarrhoea is	45
35.	Euphorbia hirta L.	-	Whole plant, leaves and milky juice	treated with root. The plant is used to cure bronchitis, asthma, and cough. The leaf paste is used to treat children who have intestinal worms. Plant milky juice is applied to cracked lips.	52
36.	Euphorbia thymifolia L.	-	Leaves	Used as a blood purifier, stimulant, and astringent in diarrhoea and dysentery.	55
37.	Eichhornia crassipes (Mart.) Solms	Used to feed animals, processed to improve soil, used as compost	Leaves	Used as antioxidant, anti- inflammatory, antimicrobial, skin whitening, neuroprotective, and hepatoprotective substances.	57
38.	Echinochloa colona (L.) Link	Used to feed animals	Leaves	Leaves have wound healing, antioxidant and antimicrobial property.	51
39.	Glinus oppositifolius (L.) A.DC.	Leafy vegetables consumed by humans	Leaves	Used to treat joint pains, diarrhoea, fever, skin disorders	59
40.	Gloriosa superba L.	Thought to be significant in maa Durga rituals.	Tuber	Used to cure arthritis, gout, inflammation, ulcers, bleeding piles, skin diseases, snakebites, etc.	49
41.	Heliotropium indicum L.	-	Leaves	The juice from the leaves is applied to wounds.	46

42.	Hydrilla verticillata (L.f.) Royle.	-	Stem, leaves	Provide complete nutrition to improve digestion, neurological health, and blood sugar control.	56
43.	Imperata cylindrica. L.	Use as a decorative plant. Utilized in roofing and weaving for mats and sacks.	Rhizome	The rhizome is chewed to kill intestinal parasites, particularly Ascaries. It is used as an antidote for snakebite and to cure fever. Rhizome is a tonic used for liver and spleen complications. A decoction of rootstock is given for diarrhoea, dysentery and gonorrhoea. Roots are used in the treatment of piles.	59
44.	Jatropha gossypiifolia L.	Ritualistic application in certain societies. Cultivate for aesthetic purposes.	Seeds, fruits	The seeds and fruits have anti- influenza properties and can be used as a sedative, analgesic, or anti-diarrheal agent.	47
45.	Lantana camara. L.	As well as being utilized as an attractive plant, <i>Lantana camara</i> stalks have found usage in manufacturing furniture such as chairs and tables.	Whole plant	Tetanus, rheumatism, and malaria are all treated with a plant decoction. Essential oil from leaves is used to treat itching and as an antiseptic to wounds.	54
46.	Luffa acutangula (L.) Roxb	The dried, ripe fruits are collected for processing into sponges and hat-making fibre, respectively.	Seeds	Seed oil is used for treatment of jaundice, diabetes, dysentery, headache and ringworm infection.	56
47.	Leucas aspera (Wild) Spreng.	Used to impart flavour and aroma to food.	Leaves	Fresh leaf juice is applied topically to skin eruptions, psoriasis, and painful swellings. Young leaves are rubbed on the forehead for colds, headaches, and chronic rheumatism. Flowers, in combination with honey, are used to treat coughs and colds.	62
48.	Mikania micrantha Kunth	To be used as animal feed	Leaves	As a first aid measure, the leaf juice is applied to cuts and	63

49.	Mimosa pudica L.	_	Root and leaves	wounds to promote blood clotting. The leaves are boiled in water, and the decoction is given to the patient suffering from dysentery. The leaf juice is applied to the sinus and piles. A few drops of root	
50.	Ottelia alismoides (L.) Pers.	-	Leaves	extract are placed in the eyes to treat eye problems Leaves are used for treating diseases like cancer, asthma, diabetes, tuberculosis,	55 59
51.	Oryza rufipogon Griff.	Put to good use as a fertilizer	Seed	haemorrhoids. Used as fooder by tribes for	57
52.	Oxalis corniculata L.	Use as a decorative plant.	Whole plant	nutrition. Used as an anticancer, antidiabetic, abortifacient, antimicrobial, and wound-healing	49
53.	Phyllanthus niruri L.	-	Fruit and root	agent. The fresh root is best for a jaundice remedy. Fruit can help with tuberculosis, wounds, sores, scabies, and ringworm.	62
54.	Portulaca oleracea L.	Used as a leafy green vegetable.	Whole plant, stem, leaves and seeds	The herb stimulates gastric secretion. Leaf paste is used to treat bones, scalds, and other skin ailments.	63
55.	Pandanus fascicularis Lam.	-	Roots and flower	Used by the Indian Ayurvedic medicines for treatment of headache, cold/flu, wounds, boils, scabies, ulcers, hepatitis, and	56
56.	Solanum surrattens Burm.f.	To be used as animal feed	Whole plant, including root	smallpox. The root is used to make well- known Ayurveda preparations, 'Dasamula'. The stem, flowers,	55

57.	<i>Sida acuta</i> Burm. F.	-	Leaves, roots and shoot	and fruits are carminative and are used to treat foot-burning. A paste made from the leaves and young shoots is used to treat boils, scabies, and other skin diseases. Roots are used in urinary troubles.	64
58.	Sphaeranthus indicus L.	-	Whole plant	Used to treat mental illness, fever, jaundice, diabetes, Cough, and gastropathy. The flowers are highly esteemed as alternatives,	
				depurative and tonics useful for skin diseases. The bark, grounded and mixed with whey, is a valuable remedy in piles. Oil prepared from the root is said to be aphrodisiac.	65
59.	Tridax procumbens L.	Effective for quick wound recovery	Leaves	The leaves are used to treat bronchial catarrh, dysentery, and diarrhoea. Leaf juice is used to stop the bleeding from cuts and wounds.	63
60.	Trichosanthes tricuspidata Lour.	Used to feed animals	Leaves	Acts as an antioxidant, anticancer, antibacterial, and antifungal agent.	65
61.	Tragia involucrata L.	-	Leaves	Leaf paste treats inflammation, wounds, eczema, scabies and skin infections.	62
62.	Trichosanthes cucumerina L.		Aerial parts	Used for treating blood pressure, heart diseases, rheumatism and skin allergy.	46
63.	Vetiveria zizanioides (L.) Nash.	Utilized both as animal feed and as a human food source	Leaves	Used for nerve and circulation problems and stomach pain.	55