



## Review Paper

# Ainslie's *Materia Medica* of Hindoostan in the perspective of plant invasion in India

Patil D. A.

Post-Graduate Department of Botany, S.S.V.P. Sanstha's L.K. Dr. P.R. Ghogrey Science College, Dhule-424005, MS, India  
dapatil\_10aug@yahoo.com

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## Abstract

*This paper communicates alien plant species divulged from Ainslie's *Materia Medica* of Hindoostan. The valid botanical name, family, local names in Hindi, other Indian languages and Sanskrit as mentioned by Ainslie himself and biogeographical affiliations examined after close scrutiny of relevant taxonomic literature, habitat category and status w.r.t. wildness or cultigen are provided in the Table-I. As many as 146 species belonging to 127 genera and 64 families of angiosperms are revealed. The dicotyledons, herbaceous flora and cultigens had a major share in bioinvasion prior to the 18<sup>th</sup> century in India. They are represented by both worlds, new as well as old. However, the alien species from the New World (American Continent) are numerically maximum (57 species), while the Asian (Excl. Indian), African and European represented in a descending order respectively by 32, 30 and 19 species. The other regions contributed by a few alien species only. This inventory will serve as the scientific baseline on plant invasion in the management of biodiversity in India.*

**Keywords:** Ainslie, *Materia Medica*, Alien Plants, Invasion, India.

## Introduction

During British regime in India, officers were appointed to conduct the business of the then government. They carried on their duties. Some of them took great interest in the bioculture, plant wealth and their utilities. Their works have been christened in some floras, books, treatises, etc. One such was Whitelaw Ainslie, a Superintending Surgeon at the then Madras Establishment in South India. His work culminated into a publication entitled '*Materia Medica of Hindoostan and Artisan's and Agriculturist's Nomenclature*'<sup>1</sup>. He felt that there was no correct list of what particular articles of the British *materia medica* could be produced in Hindoostan (then India) with their names given by the natives to different articles of medicine or diet. He mentioned their names in Indian languages in southern part of India viz., Tamool (Tamil), Telingoo (Telugu), Dukhanie (Deccan region), even Gujarati or Hindi and Sanskrit, besides English and other foreign languages. He held discussion with the contemporary knowledgeable persons and made comparative study of the bioresources. His work consists of two catalogues (I & II) which are redivided into different sections containing information on cereals, millets, pulses, spices and condiments, oil yielders, and other used for miscellaneous purposes, besides mineral sources. He thus put on records various elements of biodiversity flourished on Indian landmass.

My plunge into these catalogues is directed only to take stock of alien floral elements available to him to highlight plant invasion

in those days or even earlier. I endeavored to update botanical nomenclature and assigned to respective families and quoted plant or product names of vegetable origin especially in Indian tongue. These plant species have been deciphered for their nativity by consulting relevant taxonomic literature and mentioned against their names in the Table-I. The fund of data accrued during analysis of his work is discussed pertinently to point the status of plant invasion in the erstwhile India (Hindoostan).

## Methodology

Ainslie's work is available in the form of two catalogues-I & II<sup>1</sup>. The former runs from 1 to 214 pages, while the latter one from 217 to 331. The work also contains four appendices on various related aspects and three indices of plant names in Latin, English and Tamool (Tamil). The information is critically examined to select particularly alien plant species and their Indian names. The updated nomenclature along with the names, is provided by Ainslie in verbatim in the Table-I, besides a mention of nativity of each species and the reference/s consulted by the present author. The data is analyzed and discussed in this communication highlighting plant invasion in India.

## Results and discussion

The present in-depth study of catalogue viz., '*Materia Medica of Hindoostan*' by Ainslie<sup>1</sup> made it possible to reveal as many as 146 alien plant species on the then Indian territory. These belong 127 genera 64 families of angiosperms. Of these, the

dicotyledonous taxa share is major (130 species, 113 genera and 58 families). However, the monocotyledons contribute comparatively less accounting 16 species, 14 genera and 06 families. They can be categorised into different habitat groups viz., trees (36 species), shrubs (21 species), lianas and climbers (16 species) and herbs (72 species). Interestingly, majority of species are under cultivation (102 species), whereas 32 species have naturalised and form an integral part of local biodiversity. Some species (10) are either cultivated or wild. One species is sold in local markets for medicinal purpose viz., *Smilax china* L. (Liliaceae). This is the taxonomic status of alien flora gleaned from Ainslie's Catalogue on materia medica in the erstwhile India.

These alien species are although claimed to be of medicinal utilities, they are also useful for human welfare in the form of resources for millets, pulses, oil-seeds, spices, ornamental, timber, narcotics, beverages, vegetable, edible nuts and fruits, rubber, aromatics, fibre and some other miscellaneous purposes. They thus supported human life for the daily needs, besides medicine to combat various human afflictions. Trees, shrubs and few lianas are perennial resources. Moreover, majority of them are cultigens. It, therefore, added in the local biodiversity positively. Even, the wild alien species have added to Indian drugs. They have been also interwoven with Indian system of medicine (Ayurveda)<sup>2</sup> and folk medicines<sup>3</sup>. Few aliens are also appropriated for goddesses. Prima facie, these taxa are projected by Ainslie as of medicinal potential but they have also benefitted the then Indians and even today. It appears pertinent to project the invasion status and biogeographic affiliations of the aforesaid alien plant species. They belong to various continents, geographical regions, islands and countries from both the Old and New Worlds (Table-I). It is estimated that various parts of American continent contributed for maximum aliens (57 species). The other continents shared aliens fairly e.g. Asia (Excl. India) (32 species), Africa (30 species), Europe (19

species). In the descending order, other region or countries also contributed e.g. China (10 species), Mediterranean region and West Indies (08 species each), Arab (04 species) and Japan (03 species). The others e.g. Malay Islands, Malaysia, Middle East, Persian Gulf, Myanmar or Burma, Moluccas are represented by two species each. They are some regions or countries which shared a single species each e.g. Madagascar, Bali, Indonesia, Maldiv, Sechelles, Hawaii and Fiji, Fertile Crescent. Amazon region, Siberia, New Guinea, Java, East Indies, etc.

A fact of matter that wide knowledge gaps in invasion biology research exists particularly in developing nations. Such a scenario is an impediment to the scientific management of global policy-making on biological invasions. Compilation of alien flora is of immediate relevance for better understanding the processes for promoting invasion at local or regional scales. Indian botanists had made headway in this direction particularly after Indian independence from British regime<sup>4-6</sup>. However, what was status of plant invasion regarding its taxonomic, biogeographic affiliations and overall invasion in India have still largely remained unassisted. The present author engaged to take stock of plant invasion in the remote past, Vedic and post-Vedic period, historical period and also for before and after British period in India<sup>7-20</sup>.

About 26 exotic plant species are found as an integral part of the Indian system of medicine 'Ayurveda'<sup>2</sup>. As many as 65 alien crop species as a part of Indian agriculture<sup>21</sup>. Invasive aliens have been also focused clearly in Indian Himalayan region<sup>22</sup>, in Uttar Pradesh<sup>23</sup>, in Kashmir Himalaya<sup>24</sup>, Khandesh region of Maharashtra<sup>7</sup>. A catalogue of total invasive aliens in India is also prepared<sup>6</sup>. Allelopathic invasion is also critically limelighter in India<sup>25</sup>. These are, however, products of researches conducted in independent India. The results of such later researches and the earlier ones should be evaluated to provide a baseline data on plant invasion on Indian landmass.

**Table-1:** Ainslie's Catalogue of Materia Medica of Hindostan (1813).

Sr. No.	Plant Name & Family	Common Name	Habit	Wild (W)/ Cultivated (C)	Nativity & Reference
1.	<i>Abelmoschus esculentus</i> Moench. <i>Hibiscus esculentus</i> Malvaceae	Vindikai (Tam.) Bindakai (Tel.) Ghindamoola (San.)	Herb	C	Asia (Excl. India) & Asia: 24 Africa: 53
2.	<i>Acacia nilotica</i> (L.) Willd. ex Del. ssp. Indica (Bth.) Brenan Mimosaceae	Nullatooma putta (Tel.) Babura (San.) Karroovelum putty (Tam.)	Tree	W	North America & Arab: 26
3.	<i>Adansonia digitata</i> L. Bombacaceae	Papara poolie pullum (Tam.)	Tree	C	Tropical Africa: 27, 28, 29 Africa: 30

4.	<i>Agave vivipara</i> L. Agavaceae	Canala (San.) Kuttalay nar (Tam.) Peddukala bandu nara (Tel.)	Herb	C	West Indies: 30
5.	<i>Allium cepa</i> L. Liliaceae	Peeaj (Hin.) Woolli gudda (Tel.) Palandoo (San.)	Herb	C	Western Asia: 31 Asia (Excl. India): 24 South Asia & Mediterranean Region: 32
6.	<i>Allium sativum</i> L. Liliaceae	Lassun (Hin.) Vullay poondoo (Tam.) Velligudda (Tel.) Lasuna (San.)	Herb	C	Central Asia: 21 Europe: 33
7.	<i>Alocasia macrorhiza</i> (L.) G. Don. <i>Arum macrorhizon</i> Araceae	Verruhung Kalung (Tam.) Balloorekoochie gudda (Tel.)	Herb	C	Tropical Asia: 30
8.	<i>Aloe vera</i> (L.) Burm. f. <i>Aloe perfoliata</i> Liliaceae	Kuttalay (Tam.) Koomarie (San.) Carriapolum (Tam.) Bholum (Tel.) Eylwa (Hin.) Tarooni (San.) Koomarie (San.)	Herb	C	America: 33 North America: 53
9.	<i>Amaranthus spinosus</i> L. Amaranthaceae	Mooloo Duntoo Hora (Tel.) Moolee Keeray (Tam.) Cantala shakenie (San.)	Herb.	W	South America: 24 Tropical America: 22, 23
10.	<i>Anacardium occidentale</i> L. <i>Anacardium occidentale</i> L. Anacardiaceae	Beejara sala (San.) Monta mamedie pundoo (Tel.)	Tree	C	Tropical America: 30, 33, 34 Brazil: 13
11.	<i>Anethum graveolens</i> L. Apiaceae	Sadacoopay (Tam.) Sowa (Hin.) Misreyah (San.)	Herb	C	Europe: 24, 35 North America & West Indies: 36
12.	<i>Annona reticulata</i> L. Annonaceae	Ramsita Pullum (Tam.) Ramsita pundoo (Tel.) Ramasita (San.)	Tree	C	Tropical America: 27, 31, 38
13.	<i>Annona squamosa</i> L. Annonaceae	Sita pundoo (Tam.) Sita pandoo (Tel.) Sita (San.)	Tree	C/W	Tropical America: 27, 31. West Indies: 29 South America: 11, 12
14.	<i>Arachis hypogaea</i> L. Papilionaceae	Vayr caddalay (Tam.) Nayla sanigheloo (Tel.) Boochanaka (San.)	Herb	C	South America: 28, 39 Brazil: 29, 33
15.	<i>Areca catechu</i> L. Arecaceae	Paak (Tam.) Vukka (Tel.) Kramooka (San.)	Tree	C	Tropical Asia: 30

16.	<i>Argemone mexicana</i> L. Papaveraceae	Brumadundoo (Tam.) Burbhand (Hin.) Brumnadundie (San.)	Herb	W	Tropical Central & South America: 6 South America: 22, 23 West Indies: 33, 40
17.	<i>Averrhoa bilimbi</i> L. Averrhoaceae	Bilimbie pullum (Tam.)	Tree	C	Tropical America: 29, 30, 33
18.	<i>Averrhoa carambola</i> L. Averrhoaceae	Tamartam pullum (Tam.) Tamarta pundoo (Tel.) Carmranga (San.)	Tree	C	Tropical America: 30
19.	<i>Bauhinia tomentosa</i> L. Caesalpiniaceae	Coat Attie nar (Tam.) Usmadugha (San.)	Tree	C, W	Southern Africa: 41
20.	<i>Benincasa hispida</i> (Thunb.) Cogn. <i>Cucurbita hispida</i> Cucurbitaceae	Poosnikai (Tam.) Goomadikai (Tel.)	Climber	C	Java: 42, 53
21.	<i>Bixa orellana</i> Linn. Bixaceae	--	Tree	C	South America: 1 Tropical America: 28, 33
22.	<i>Boerhavia repens</i> L. var. <i>diffusa</i> (L.) Hook f. <i>Boerhavia diffusa</i> Linn. Nyctaginaceae	Mookaruttay vayr (Tam.) Attika mammedie vayroo (Tel.)	Herb	W	Tropics: 51 South Africa: 70
23.	<i>Borassus flabellifer</i> L. Arecaceae	Pannang Khulloo (Tam.) Tatie kullo (Tel.) Tala (San.)	Tree	C	Tropical Africa: 6, 22, 23
24.	<i>Brassica juncea</i> (Linn.) Czern. <i>Sinapis chinensis</i> Brassicaceae	Rai (Hin.) Avaloo (Tel.) Rajica (San.)	Herb	C	Middle East & Neighbouring Region: 71 Eastern Europe & China: 72
25.	<i>Caesalpinia bonduc</i> (L.) Roxb. <i>Guilandina bonducella</i> Linn. Caesalpiniaceae	Kalichikai (Tam.) Getsakai (Tel.) Kooboyrtchie (San.)	Lianas	W	North America: 50
26.	<i>Caesalpinia pulcherrima</i> (L.) Sw. Caesalpiniaceae	--	Shrub	C	Tropical America: 28 West Indies: 49
27.	<i>Calotropis gigantea</i> (L.) Ait. <i>Asclepias gigantea</i> Asclepiadaceae	Yercum vayr (Tam.) Vullerkoo (Tam.) Acad (San.) Arka (San.) Tella Jilladoo (Tel.) Svaytaurkum (San.)	Shrub	W	Tropical Africa: 6, 7
28.	<i>Canna indica</i> L. Cannaceae	Kull valei munnie (Tam.) Saooya jaya (Hin.) Seelarumba (Sen.)	Herb	C	Tropical America: 30, 33

29.	<i>Cannabis sativa</i> L. Cannabinaceae	Ganjak (Tam.) Vijya (San.) Ganjica (San.)	Herb	W,C	Western & Central Asia: 2 Central Asia: 22 Asia (Excl.India): 48
30.	<i>Capsicum annuum</i> L. var. <i>annuum</i> Solanaceae	--	Shrub	C	South America: 21 Tropical America: 38, 42
31.	<i>Capsicum frutescens</i> L. Solanaceae	Mollaghai (Tam.) Laal mirch (Hin.) Merapakaila (Tel.) Brahm Maricha (San.)	Shrub	C	Tropical America: 33 Central & South America: 27 Tropical America & West Indies: 32
32.	<i>Cardiospermum halicacabum</i> L. Sapindaceae	Mooda cottam (Tam.) Booddn hankoo (Tel.) Karavee (San.)	Climber	W	South America: 32, 34
33.	<i>Carica papaya</i> L. Caricaceae	Puppalie pullum (Tam.)	Tree	C	Tropical America: 33, 38 West Indies & Tropical America: 36
34.	<i>Carthamus tinctorius</i> L. Asteraceae	Sendoorkym (Tam.) Koosum (Hin.) Koosumba (Tel.) Cucumbha (San.)	Herb.	C	South-West Asia: 30 West Asia: 33
35.	<i>Cassia alata</i> L. Caesalpinaceae	Scemie Aghatee (Tam.) Seema Avisee (Tel.) Dveepa gustia (San.)	Shrub	W	West Indies: 6, 23 South America: 22
36.	<i>Cassia fistula</i> L. Caesalpinaceae	Kennaykayi (Tam.) Amultas (Hin.) Suvarnaca (San.) Konney puttoy (Tam.)	Tree	C	North America: 50
37.	<i>Cassia sophera</i> L. Caesalpinaceae	Poonaverie (Tam.) Pydu tenghudoo (Tel.) Svurna Meyharie (San.)	Herb	W	Pantropical: 51
38.	<i>Cassia tora</i> L. Caesalpinaceae	Tagray verei (Tam.) Tagarish-akoo (Tel.) Praboonata (San.)	Herb	W	Tropical South America: 6 South America: 22, 23
39.	<i>Ceiba pentandra</i> (L.) Gaertn. <i>Bombax pentandrum</i> Bombaceae	Elavum pisin (Tam.) Boorugabunka (Tel.) Tshal Mullie (San.)	Tree	C	Tropical America: 29
40.	<i>Chenopodium album</i> L. Chenopodiaceae	--	Herb	W	Europe: 22, 23, 24
41.	<i>Chenopodium ambrosioides</i> L. Chenopodiaceae	--	Herb	W	South America: 24 Tropical America: 22
42.	<i>Chrysanthemum indicum</i> L. Asteraceae	Sevindie poo (Tam.)	Herb	C	China & Japan: 27, 28

43.	<i>Cicer arietinum</i> L. Papilionaceae	Cudaley (Tam.) Sinigheloo (Tel.) Chinnaka (San.)	Herb	C	South Europe: 34
44.	<i>Cinnamomum camphora</i> (L.) Nees & Eberm. <i>Laurus camphora</i> Lauraceae	Carpurum (Tam.) Cafoor (Hin.) Carphura (San.)	Tree	C	Japan: 69 China & Japan: 73
45.	<i>Citrullus lanatus</i> (Thunb.) Mats. & Nakai <i>Cucurbita citrullus</i> Cucurbitaceae	Pitchea pullum (Tam.) Turbooze (Hin.) Darbojee (Tel.) Nipala, Bunti beeja (Sam.)	Climber	C	Tropical Africa: 32 South Africa: 13
46.	<i>Citrus aurantium</i> L. Rutaceae	Kalinjie pullum (Tam.) Kichidie pundoo (Tel.) Kounla (Hin.) Swadu Naring (San.)	Tree	C	South China & Indonesia: 33
47.	<i>Citrus medica</i> L. Rutaceae	--	Tree	C	China: 43
48.	<i>Cleome viscosa</i> L. Capparidaceae	Nahivaylie (Tam.) Keeka vamitie (Tel.) Svarna burbara (San.)	Herb	W	Tropical America: 6, 29
49.	<i>Clitoria ternatea</i> L. Papilionaceae	Vulley kakartanvayr (Tam.) Tella Ghentana Vayroo (Tel.) Gheeriekurnie (San.)	Climber	C/W	Tropical America: 28
50.	<i>Cocos maldivica</i> <i>Lodoicea maldivica</i> (Gmel.) Pers. Arecaceae	Koddil Tayaga (Tam.) Samootrapee Tenhaga (Tel.) Ubdie Nerikaylum (San.)	Tree	C,W	Sechelles Islands (Indian Ocean): 44 Maldives & Sechelles: 1
51.	<i>Coffea arabica</i> L. Rubiaceae	Copie cottay (Tam.)	Shrub	C	Ethiopia: 45
52.	<i>Colocasia esculentum</i> Schott. <i>Caladium esculentum</i> Araceae	Saymboo kaluny (Tam.) Chimma gudd (Tel.) Chamaka (San.)	Herb	C	Hawaii & Fiji: 44
53.	<i>Corchorus olitorius</i> L. Tiliaceae	--	Herb	W	Tropical Africa: 22, 23 America: 32
54.	<i>Coriandrum sativum</i> L. Apiaceae	Cottamillie (Tam.) Dhanya (Hin.) Dhanyaca (San.)	Herb	C	Europe: 24 South Europe: 33
55.	<i>Crotalaria juncea</i> L. Papilionaceae	Janappa nar (Tam.) Kadumbuy nar (Tam.) San/Sun (Hin.) Sana/Senna (San.)	Herb	C	Asia (Excl. India): 21, 52

56.	<i>Cucumis melo</i> L. Cucurbitaceae	Molam pullum (Tam.) Khirbooza (Hin.)	Climber	C	Asia (Excl. India): 21, 52
57.	<i>Cuminum cyminum</i> L. Apiaceae	Siragum (Tam.) Zira (Hin.) Gilaka (Tel.) Jiraca (San.)	Herb	C	South Europe: 33 Mediterranean Region: 42, 53
58.	<i>Datura metel</i> L. <i>Datura fastuosa</i> Solanaceae	Karoo oomaty (Tam.) Dhatoora (Hin.) Dustura (San.)	Shrub	W	South America & Mexico: 22 Tropical America: 6, 22, 23, 54
59.	<i>Daucus carota</i> L. Apiaceae	Gajur (Hin.) Carrot calung (Tam.)	Herb	C	Africa & Europe: 24 Eurasia: 28 Europe & Temperate Asia: 39
60.	<i>Dioscorea alata</i> L. Dioscoreaceae	Cachay Kalung (Tam.)	Climber	C	New Guinea: 55, 56, 74
61.	<i>Elephantopus scaber</i> L. Asteraceae	--	Herb	W	America: 34, 42
62.	<i>Eucalyptus resinifera</i> Sm. Myrtaceae	Thumble kaon (Tam.)	Tree	C	Australia: 58
63.	<i>Eupatorium triplinerve</i> Vahl. <i>Eupatorium ayapana</i> Asteraceae	Ayapanie (Tam.)	Herb	C	Tropical America: 30, 59 Central America: 42, 53
64.	<i>Euphorbia antiquorum</i> L. Euphorbiaceae	Saynd ka dood (Hin.)	Shrub	C	Africa: 60
65.	<i>Euphorbia neriifolia</i> Euphorbiaceae	Elechullia (Tam.) Akoojemoodoo (Tel.) Putraharie (San.)	Shrub	C	Africa: 53
66.	<i>Euphorbia tirucalli</i> L. Euphorbiaceae	Kalli (Tam.)	Shrub	C	Africa: 34, 61 Tropical Africa: 33
67.	<i>Evolvulus alsinoides</i> (L.) L. Convolvulaceae	Vishnookranti (Tam.) Vishnookrandum (Tel.) Vaishnava (San.)	Herb	W	America: 57
68.	<i>Ferula assafoetida</i> L. Apiaceae	Perungynum (Tam.) Ingoova (Tel.) Hinga (San.)	Herb	C	Central Asia, Europe & North Africa: 35 Persia: 43
69.	<i>Ficus carica</i> L. Moraceae	Simie Attie pullum (Tam.) Meydi Pundee (Tel.)	Tree	C	Western Asia & Eastern Mediterranean Region: 62 Syria & Palestine: 38
70.	<i>Foeniculum vulgare</i> Mill. <i>Anethum foeniculum</i> Apiaceae	Mayuri (Hin.) Perumsiragum (Tam.) Madhurica (San.)	Herb	C	Europe & Asia Minor: 35 Europe: 37
71.	<i>Fumaria officinalis</i> L. Fumariaceae	Pitpapa (Hin.)	Herb	W	North Africa, Europe & Western Asia: 63

72.	<i>Glycyrrhiza glabra</i> L. Papilionaceae	Addimodrum (Tam.) Jethimadh (Hin.) Yastimadhuca (San.)	Climber	W,C	Mediterranean Region: 64 Arabia, Persian Gulf, Afghanistan, Turkestan, Asia Minor & Siberia: 65
73.	<i>Gossypium herbaceum</i> L. Malvaceae	Paratie vayr (Tam.) Puttie nayroo (Tel.) Karpasum (San.) Raoie (Hin.)	Herb	C	Arabia & Asia Minor: 27 Africa & Asia: 28
74.	<i>Helitropium indicum</i> L. Boraginaceae	Tayl-kodukoo (Tam.) Tayl munnie (Tel.) Vrishahie kalie (San.)	Herb	W	America: 26, 54 South America: 32
75.	<i>Hevea brasiliensis</i> (Willd. ex A.Juss.) Muell.-Arg. <i>Hevea caoutchoue</i> Euphorbiaceae	Konie taat (Tam.) Gonay butta (Tel.)	Tree	C	Amaron Region: 66
76.	<i>Hibiscus cannabinus</i> L. Malvaceae	Poolchei keeray (Tam.) Gongoo koorra (Tel.) Carnikara (San.)	Herb	C	Tropical Africa: 31 Tropical & Subtropical Africa: 28
77.	<i>Hibiscus rosa-sinensis</i> L. Malvaceae	Sapatee Poo (Tam.) Dasanie (Tel.)	Shrub	C	Asia (Excl.India): 24 China: 67
78.	<i>Hibiscus sabdariffa</i> L. Malvaceae	--	Herb	C	America: 31 West Africa: 28 West Indies: 33, 36, 43
79.	<i>Hordeum vulgare</i> L. subsp. <i>vulgare</i> (Syn. <i>H. distichon</i> L. var. <i>dististim</i> <i>Hordeum distichon</i> Poaceae	Barlee Arisee (Tam.) Jav (Hin.)	Herb	C	Europe & North America: 37 Southern Fertile Crescent: 21
80.	<i>Hyoscyamus niger</i> L. Solanaceae	Korrassanie omum (Tam.) Khorrassanie Ajanan (Hin.)	Herb	C	Africa & Europe: 48
81.	<i>Illicium verum</i> Hook. <i>Illicium anisatum</i> Illiciaceae	Anasee poo (Tam.)	Tree	C	China: 1 South-Eastern Asia, North America & West Indies: 75
82.	<i>Ipomoea batatas</i> (L.) Lam. <i>Convolvulus batatas</i> Convolvulaceae	Sukkuray vullie kalung (Tam.) Sukkara velligudda (Tel.) Sharkara kunda (San.)	Climber	C	Tropical America: 28 America: 42 Brazil: 4
83.	<i>Ixora coccinea</i> L. Rubiaceae	Veechie Poo (Tam.) Banduti (Hin.) Manhina (Tel.) Bundhuca (San.)	Shrub	W,C	China: 50, 53



84.	<i>Jasminum sambac</i> (L.) Ait. Oleaceae	Kodey Mallie Poo (Tam.) Booodoo Mallie (Tel.) Navamallica (San.) Bela (Hin.)	Climber	C	Tropical Africa: 68
85.	<i>Jatropha curcas</i> Euphorbiaceae	Caat amunak (Tam.) Bagharinda (Hin.) Adivie Amida (Tel.) Kanana herundum (San.)	Tree	C	Tropical America: 36
86.	<i>Jatropha multifida</i> L. Euphorbiaceae	--	Shrub	C	South America: 67 Tropical America: 30
87.	<i>Kalanchoe laciniata</i> (L.) DC. <i>Cotyledon lanciniata</i> Linn. Crassulaceae	--	Herb	C	South Africa: 29, 30
88.	<i>Lablab purpureus</i> (L.) Sweet <i>Dolichos lablab</i> Papilionaceae	Averay kai (Tam.) Chickoodi Kaia (Tel.)	Climber	C	Tropical Africa: 50
89.	<i>Lagenaria siceraria</i> (Mol.) Standl. <i>Cucurbita lagenaria</i> Cucurbitaceae	Chooraykai (Tam.) Anapakaia (Tel.)	Climber	C	Africa & America: 13 Africa: 21
90.	<i>Lawsonia inermis</i> L. <i>Lawsonia spinosa</i> Lythraceae	Maroodanie (Tam.) Gorunta chettoo (Tel.) Sahachera (San.)	Shrub	C	Middle East: 30, 33
91.	<i>Lens culinaris</i> Medic. Ervum lens Papilionaceae	Mussor (Hin.)	Herb	C	Western Temperate Asia: 39
92.	<i>Linum usitatissimum</i> L. Linaceae	Aliveiei (Tam.) Sirroa sanuveiei (Tam.)	Herb	C	Fertile Crescent (Georgia): 21 Europe: 24, 39
93.	<i>Lycopersicon lycopersicum</i> (L.) Karst. <i>Solanum lycopersicum</i> Solanaceae	Seemie takalie Pullim (Tam.)	Herb	C	Tropical America: 39 Mexico & South America: 30
94.	<i>Manihot utilissima</i> Pohl. (Syn. <i>M. esculputa</i> Crantz, <i>Jatropha manihot</i> Euphorbiaceae	Maravullie kalung (Tam.)	Shrub	C	Tropical America: 49, 51
95.	<i>Melaleuca leucadendron</i> (L.) L.	Kyapootie tylum (Tam.)	Tree	C	Malaysia: 28
96.	<i>Melia azedirach</i> L. Meliaceae	Vaypum puttey (Tam.) Vaympa putta (Tel.) Nimba (San.)	Tree	C	Asia (Excl.India): 24 Myanmar: 53
97.	<i>Mentha spicata</i> L. <i>Mentha crispa</i> Lamiaceae	Widdatilam (Tam.) Poodina (Hin.)	Herb	C	Europe: 38

98.	<i>Millingtonia hortensis</i> L.f. Bignoniaceae	Mara Mallicpoo (Tam.)	Tree	C	Burma & Malayan Archipelago: 76 South-East Asia & Malesia: 38 South-East Asia: 33
99.	<i>Mimosa pudica</i> L. Mimosaceae	Tottal vadie (Tam.) Moonooghoo tamard (Tel.)	Shrub	C	South America: 40 Brazil: 7, 34
100.	<i>Mirabilis jalapa</i> L. Nyctasinaceae	Undimundarei (Tam.) Gool Abash (Hin.) Sundiaragum (Tel.) Sundiaragum (San.)	Herb	C	South America: 24, 53 Peru: 22, 23 Mexico: 38
101.	<i>Mucuna pruriens</i> (L.) DC. <i>Dolichos pruriens</i> Papilionaceae	Poonaykalei (Tam.) Peelindugookailoo (Tel.) Kiwach (Hin.) Capitachu (San.)	Climber	W	America: 2, 21
102.	<i>Murraya paniculata</i> (L.) Jack. <i>Murraya exotica</i> Rutaceae	--	Tree	C	China: 41
103.	<i>Myristica fragrans</i> Houtt. <i>Myristica moschata</i> Myristicaceae	Jadiputrie (Tam.) Jawatrie (Hind.) Jatipatri (San.)	Tree	C	Moluccas: 38
104.	<i>Nerium indicum</i> Mill. <i>Nerium odorum</i> Apocynaceae	Aralie poo (Tam.) Aralivayr (Tam.) Karraveera (San.) Ghendroopoo (Tel.)	Shrub	C	Mediterranean Region: 28 Tropical & Subtropical Asia: 30
105.	<i>Nicotiana tabacum</i> L. Solanaceae	Poghii elley (Tam.) Tumbakoo (Hin.) Poghakoo (Tel.) Tomrakta (San.)	Herb	C	America: 2, 21, 27, 28
106.	<i>Nigella sativa</i> L. Rununculaceae	Cavin Siragam (Tam.) Nulla Gilakura (Tel.) Cela Jira (Hin.) Musavi (San.)	Herb	C	Africa & Europe: 24
107.	<i>Opuntia ficus-indica</i> (L.) Mill. <i>Cactus ficus indica</i> Cactaceae	Nagatalie kullie (Tam.)	Shrub	C	North America: 47
108.	<i>Origanum vulgare</i> L. <i>Origanum majorana</i> Linn. Lamiaceae	Maroo (Tam.)	Herb	C	Europe:48
109.	<i>Oxalis corniculata</i> L. Oxalidaceae	Pooliaray keeray (Tam.) Poolie chinta koora (Tel.) Shoollika (San.)	Herb	W	Europe: 6, 22 Asia (Excl. India) & Europe: 24

110.	<i>Panicum miliaceum</i> L. Poaceae	Chamay (Tam.) Samaloo (Tel.) Shamaka (San.)	Herb	W,C	Asia (Excl. India): 24, 48
111.	<i>Papaver somniferum</i> L. Papavaraceae	Post (Hin.)(San.) Abinie (Tam.) Afeem (Hin.) Afiun (Hin.) Cassa Cassa (Tam.)	Herb	C	Western Mediterranean Region of Europe: 2 Europe: 24, 52
112.	<i>Paspalum scrobiculatum</i> L. <i>Paspalum frumantaceum</i> Poaceae	Achloa (Tam.) Arihchloa (Tel.) Kodow (Hin.) Kodrawa (San.)	Herb	W, C	Tropical Africa: 21
113.	<i>Pedaliium murex</i> L. Pedaliaceae	Ananeringie (Tam.) Burray gokeroo (Hin.)	Herb	W	Tropical America: 6, 22, 23 Africa: 42
114.	<i>Phaseolus lunatus</i> L. Papilionaceae	--	Herb	C	America: 30
115.	<i>Phoenix dactylifera</i> L. Arecaceae	Poyr-Etchum Pullum (Tam.) Caryoora pundoo (Tel.) Carjoora (San.) Kehjoor (Hin.)	Tree	C	Persian Gulf: 12 Arabia & North Africa: 44
116.	<i>Phyla nodiflora</i> (L.) Greene <i>Verbena nodiflora</i> Verbenaceae	Podootalei (Tam.) Bokenakoo (Tel.) Vashera (San.)	Herb	W	South America: 52
117.	<i>Phyllanthus acidus</i> (L.) Skeels. Syn. <i>Cicca acida</i> (L.) Merr. <i>Cicca distica</i> Linn. Euphorbiaceae	Arnellie pullum (Tam.)	Tree	C	Malay Islands & Madagascar: 36, 42
118.	<i>Physalis angulata</i> L. Solanaceae	Tanalie pullum (Tam.) Takkali pundoo (Tel.) Agnimunda (San.)	Herb	W	Tropical America: 6, 22 America: 34, 42
119.	<i>Piper betle</i> L. Piperaceae	Vettily (Tam.) Tamalap akoo (Tel.) Nagavullie (San.)	Lianas	C	Bali & East Indies: 44
120.	<i>Pisum sativum</i> L. Papilionaceae	Puttanie (Tam.) Goondoo sanigheloo (Tel.)	Herb	C	West Asia: 34
121.	<i>Plumbago zeylanica</i> L. Plumbaginaceae	Chita (Hind.) Citramoolum (Tam.) Chitraca (San.)	Shrub	W	Africa: 26
122.	<i>Plumeria alba</i> L. Apocynaceae	Elat Araliepoo (Tam.) Adivie Ghenndroo Poo (Tel.) Kanana Karaveera (San.)	Tree	C	West Indies: 42, 77 Tropical America: 38

123.	<i>Portulaca quadrifida</i> L. Portulacaceae	Passetie keeray (Tam.) Batsalikoora (Tel.) Oojodykee (San.)	Herb	W	Tropical America: 6, 22, 23
124.	<i>Portulaca oleracea</i> L. Portulacaceae	Carie keeray (Tam.)	Herb	W	Tropical South America: 6 South America: 22, 23
125.	<i>Psidium guajava</i> L. <i>Psidium pyriferum</i> Myrtaceae	Coia pullum (Tam.) Utchola (Sen.)	Tree	C	Tropical America: 13, 33, 38, 39
126.	<i>Punica granatum</i> L. Punicaceae	Madalum pullum (Tam.) Dadima pundoo (Tel.) Darim (San.)	Tree	C	Afganistan, Baluchistan & Persia: 39 Afghanistan & Persia: 53
127.	<i>Ricinum communis</i> L. Euphorbiaceae	Sitt ammonaka unnay (Tam.) Sitt-a-amidiala nooay (Tel.)	Tree	C	West-Central Africa: 21 Africa: 27
128.	<i>Rosa centifolia</i> L. Rosaceae	Goolabu-poo (Tam.)	Shrub	C	Eastern Caucassus, Armenia & Persia: 78
129.	<i>Rubia cordifolia</i> L. <i>Rubia manjith</i> Rubiaceae	Sawil codie (Tam.) Manjittittie (Tam.) Manjith (Hin.) Mandistie (Tel.)	Climber	W	Asia (Excl. India) & Africa: 24, 48
130.	<i>Rumex vesicarius</i> L. Pdygonaceae	Sookan Keeray (Tam.)	Herb	C	South Europe, Africa & South- East Asia: 60
131.	<i>Ruta chalepensis</i> L. <i>Ruta graveolens</i> Rutaceae	Arooda (Tam.) Saturee (Hin.)	Herb	C	Mediterranean Region: 28, 29, 36 Persia & Western Asia: 79
132.	<i>Sansevieria roxburghiana</i> Schult. & Schutlt. f. <i>Sansevieria zeylanica</i> Agavaceae	Morool Kalung (Tam.) Changa gudda (Tel.) Muroova (San.)	Herb	C	Ceylon (Sri Lanka): 27 Africa: 30 South Africa: 33
133.	<i>Smilax china</i> L. Liliaceae	Puringay puttey (Tam.) Chob chinie (Hin.)	Climber	Sold in Market	China: 80 China & Japan: 81
134.	<i>Solanum melongena</i> L. Solanaceae	Kaliana kattrikai (Tam.) Kodikaler-Vankia (Tel.) Deergavartaka (San.)	Shrub	C	West Indies: 38
135.	<i>Solanum nigrum</i> L. Solanaceae	Munna Takalia Pullum (Tam.) Canchee pundoo (Tel.) Kala machie (San.)	Herb	W	Tropical America: 11, 22, 23
136.	<i>Swietenia mahogoni</i> (L.) Jacq. Meliaceae	Mahagony	Tree	C	Central America & West Indies: 29, 30, 82 West Indies: 83

137.	<i>Tamarindus indica</i> L. Caesalpiniaceae	Poolie (Tam.) Umblic (Hin.) Chinta pundoo (Tel.) Amlika (San.)	Tree	C	Tropical Africa: 21, 28 Tropical America: 32, 83
138.	<i>Terminalia catappa</i> L. Combretaceae	Nit Vadom cottay (Tam.) Badamie (Hin.) Hingodie (San.)	Tree	C	Tropical Asia: 38, 33 Moluccas: 34
139.	<i>Trianthema portulacastrum</i> L. <i>Trianthema monogyna</i> Aizoaceae	Sharunou vayr (Tam.) Ghelijehroo (Tel.) Poonarnave (San.)	Herb	W	Tropical America: 84, 85
140.	<i>Tribulus terrestris</i> L. Zygophyllaceae	Neringie (Tam.) Pulleroo (Tel.) Soodumitra (San.)	Herb	W	Asia (Excl. India) & Africa: 24 Tropical America: 22, 23
141.	<i>Trichosanthes anguina</i> L. Cucurbitaceae	Poodlungai (Tam.) Pettakai (Tel.) Pottta (San.)	Climber	C	Tropical Asia: 68
142.	<i>Trigonella foenum-graecum</i> Papilionaceae	Vendeum (Tam.) Maytie (San.) Maytie (San.) Mintoolee (Tel.)	Herb	C	Mediterranean Region: 21 Asia (Excl. India) & Europe: 24
143.	<i>Vernonia anthelmintica</i> (L.) Willd. Asteraceae	Caat Siragum (Tam.) Dividatsipala vutil (Tam.) Kanana zeeraka (San.) Kishmish (Hin.) Adivie Zeela Kara (Tel.)	Herb	W	Malay Archipelago: 86
144.	<i>Vitis vinifera</i> L. Vitaceae	Dakh (Hin.) Kodimoondrie pullum (Tam.) Drocha kundoo (Tel.) Dracha (San.)	Lianas	C	Asia (Excl. India) & Europe: 24
145.	<i>Zea mays</i> Poaceae	Mukka cholom (Tam.) Mokka zonaloo (Tel.) Bootah (Hin.)	Herb	C	America: 26 Central America: 87 Tropical South America: 12
146.	<i>Ziziphus jujuba</i> Mill. Rhamnaceae	Elandi vayr (Tam.) Rigoovaryroo (Tel.) Budderie (San.)	Tree	C	Subtropics & Warm Temperate Zone: 41

## Conclusion

During botanisation and writing of floras, authors hardly pay attention to nativity of alien plant species. There have been very few attempts to analyse plant invasion by alien taxa in India. The present author inventorised some botanical annals whether ancient Indian ones or published before Indian independence. These monumental literary sources have indicated plant invasion in Indian territory in ancient period or recent past. The

present attempt also proved fruitful in divulging and deciphering alien plant species in India. This inventory will be helpful as database while evaluating Indian biodiversity and its management in future.

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