

Contents

1	An Introduction to Medicinally Important Trees	1
1.1	Introduction	1
1.2	Phytochemicals of Medicinal Importance of Woody Plants	2
1.3	Solvents and Techniques for Extraction and Isolation of Medicinal Compounds.	4
1.4	Important Medicinal Activities of Woody Plants.	4
1.4.1	Antidiabetic Activity of Important Trees.	5
1.4.2	Trees with Anticancer Activity	5
1.4.3	An Account of Antimicrobial Activity of Important Woody Plants	8
1.4.4	Antiviral and Possible Anti-HIV Activity of Important Woody Plants	9
1.4.5	Cardioprotective and Hepatoprotective Activities	12
1.4.6	Analgesic and Antipyretic Activities	13
1.4.7	Trees with Aphrodisiac and Antifertile Activities	14
1.4.8	Medicinal Properties of Important Leguminous Trees	17
1.4.9	Medicinally Important Figs, Nuts, and Edible Fruits	18
2	Important Trees with Antidiabetic Activities	21
2.1	Introduction	21
2.2	Important Trees with Antidiabetic Activities.	22
2.3	<i>Achras sapota</i> L. (Syn: <i>Manilkara zapota</i>)	23
2.4	<i>Bombax ceiba</i> L.	24
2.5	<i>Barringtonia acutangula</i> (L.) Gaertn.	27
2.6	<i>Casuarina equisetifolia</i> L.	28
2.7	<i>Conocarpus lancifolius</i> Eng.	29
2.8	<i>Eriobotrya japonica</i> Lindl.	32
2.9	<i>Euphorbia pulcherrima</i> Willd.	34
2.10	<i>Jasminum sambac</i> L.	34
2.11	<i>Kigelia pinnata</i> Jacq. (Syn: <i>Bignonia africana</i>)	36
2.12	<i>Lagerstroemia indica rosea</i>	38

2.13	<i>Hibiscus rosa sinensis</i> L.	41
2.14	<i>Morus alba</i> L.	42
2.15	<i>Murraya koenigii</i> L.	44
2.16	<i>Opuntia ficus-indica</i> L.	45
	References.	48
3	Trees with Anticancer Activities	55
3.1	Introduction	55
3.2	Important Trees with Anticancer Activities	58
3.3	<i>Bauhinia variegata</i> L.	58
3.4	<i>Callistemon citrinus</i> L.	60
3.5	<i>Carica papaya</i> L.	62
3.6	<i>Cycas revoluta</i> Thunb.	65
3.7	<i>Dillenia indica</i> L.	66
3.8	<i>Jacaranda mimosifolia</i> D. Don	67
3.9	<i>Jasminum officinale</i> L.	69
3.10	<i>Magnolia grandiflora</i> L.	70
3.11	<i>Plumeria obtusa</i> L.	72
3.12	<i>Plumeria rubra</i> L.	74
3.13	<i>Sapium sebiferum</i> L. (syn: <i>Triadica sebifera</i>)	75
3.14	<i>Schleichera oleosa</i> Lour.	77
3.15	<i>Thuja occidentalis</i> L.	78
	References.	80
4	Trees with Antimicrobial Activities	85
4.1	Introduction	85
4.2	An Account of Woody Plants with Antimicrobial Activities	87
4.3	<i>Ailanthus altissima</i> (Mill.) Swingle	87
4.4	<i>Bougainvillea spectabilis</i> Willd.	89
4.5	<i>Cedrus deodera</i> Roxb. (Syn <i>Pinus deodara</i> Roxb. ex D. Don)	91
4.6	<i>Chukrasia velutina</i> Roxb. (Syn: <i>Chukrasia tabularis</i> A. Juss)	92
4.7	<i>Madhuca longifolia</i> L.	93
4.8	<i>Melia azedarach</i> L.	95
4.9	<i>Podocarpus macrophyllus</i> Thunb.	98
4.10	<i>Polyalthia longifolia</i> Sonn.	99
4.11	<i>Toona ciliata</i> M. Roem (Syn: <i>Cedrela toona</i>)	100
4.12	<i>Tecoma stans</i> L Juss. Ex Kunth Syn (<i>Bigonia Stans</i>)	102
4.13	<i>Terminalia mantaly</i> L.	104
	References.	105
5	Woody Plants with Possible Anti-HIV Activity	109
5.1	Introduction	109
5.2	Anti-HIV Compounds	110
5.3	Trees with Possible Anti-HIV Potential.	110
5.4	<i>Artocarpus integrifolia</i> L. (Syn: <i>Artocarpus heterophyllus</i> Lam.)	111

5.5	<i>Aegle marmelos</i> L.....	113
5.6	<i>Caesalpine pulcherrima</i> L.	114
5.7	<i>Gleditsia triacanthos</i> Linn.	115
5.8	<i>Euphorbia royleana</i> Boiss.....	117
5.9	<i>Jatropha curcas</i> L.....	119
5.10	<i>Heterophragma adenophyllum</i> Seem.	120
5.11	<i>Mimusops elengi</i> L.	122
5.12	<i>Platanus orientalis</i> L.....	123
5.13	<i>Syzygium cumini</i> L.	124
5.14	<i>Tamarix aphylla</i> L.....	126
	References.....	127
6	Trees with Hepatoprotective and Cardioprotective Activities	133
6.1	Introduction	133
6.2	An Account of Some Trees with Hepatoprotective and Cardioactive Activities	134
6.3	<i>Alstonia scholaris</i> L. R. Br (Syn: <i>Echites scholaris</i>).....	134
6.4	<i>Anogeissus acuminata</i> (Roxb. ex DC.)	137
6.5	<i>Crataeva religiosa</i> Forst f.....	138
6.6	<i>Carissa carandas</i> L.....	139
6.7	<i>Cupresses sempervirens</i> L.....	143
6.8	<i>Diospyros</i> Spp.....	144
6.8.1	<i>Diospyros cordifolia</i> Roxb.	147
6.9	<i>Nerium oleander</i> L.	147
6.10	<i>Terminalia arjuna</i> Roxb.	149
6.11	<i>Thevetia peruviana</i> Pers. (Syn: <i>Cascabela thevetia</i>).....	152
	References.....	154
7	Antipyretic and Analgesic Activities of Some Economically Important Woody Plants	159
7.1	Introduction	159
7.2	An Account of Important Trees	159
7.3	<i>Brachychiton populneus</i> (Schott & Endl.) R. Br	161
7.4	<i>Ceiba speciosa</i> A. St.-Hill (Syn: <i>Chorisia speciosa</i>).....	162
7.5	<i>Eucalyptus citriodora</i> Hook. (Syn: <i>Corymbia citriodora</i>).....	166
7.6	<i>Murraya exotica</i> L. (Syn: <i>Murraya paniculata</i>)	168
7.7	<i>Pinus roxburghii</i> Sarg.....	169
7.8	<i>Pterospermum acerifolium</i> L.	172
7.9	<i>Putranjiva roxburghii</i> Wall.....	174
7.10	<i>Salix babylonica</i> L. (Syn. <i>Salix japonica</i> Thunb.).....	175
7.11	<i>Salix tetrasperma</i> Roxb.....	177
7.12	<i>Tectona grandis</i> L.....	178
7.13	<i>Zizyphus mauritiana</i> Lam.....	180
	References.....	182

8	Aphrodisiac and Abortifacient Activities of Important Trees.	187
8.1	Introduction	187
8.2	An Account of Aphrodisiac and Abortifacient Activities of Economically Important Woody Plants	189
8.3	<i>Albizia lebbeck</i> (L.) Benth.	189
8.4	<i>Broussonetia papyrifera</i> L. (Syn: <i>Morus papyrifera</i>)	192
8.5	<i>Butea monosperma</i> Lam. (Syn <i>B. frondosa</i> Koenig Ex Roxb.)	193
8.6	<i>Dombeya rotundifolia</i> Hocsht.	195
8.7	<i>Lantana camara</i> L.	196
8.8	<i>Myrtus communis</i> L.	200
8.9	<i>Ricinus communis</i> L.	201
8.10	<i>Saraca indica</i> L. (Syn: <i>Saraca asoca</i> Roxb., De. Wild)	204
	References.	205
9	Leguminous Trees and Their Medicinal Properties.	211
9.1	Introduction	211
9.2	An Account of Medicinally Important Leguminous Trees	213
9.3	<i>Acacia catechu</i> L. (Syn: <i>Senegalia catechu</i>)	214
9.4	<i>Acacia modesta</i> Wall. (Syn: <i>Senegalia modesta</i>)	214
9.5	<i>Albizia procera</i> Roxb.	216
9.6	<i>Cassia fistula</i> L.	218
9.7	<i>Dalbergia sissoo</i> Roxb.	218
9.8	<i>Delonix regia</i> Raf.	221
9.9	<i>Erythrina suberosa</i> Roxb.	221
9.10	<i>Millettia ovalifolia</i> (Syn: <i>M. peguensis</i>)	224
9.11	<i>Parkinsonia aculeata</i> L.	225
9.12	<i>Prosopis juliflora</i> Swart.	227
9.13	<i>P. spicigera</i> L. (Syn: <i>P. cineraria</i>)	227
	References.	230
10	Figs and Their Medicinal Value.	235
10.1	Introduction	235
10.2	Summary of Trees That Produce Medicinally Important Figs	235
10.3	<i>Ficus benghalensis</i> L.	236
10.4	<i>F. benjamina</i> L.	237
10.5	<i>F. carica</i> L.	239
10.6	<i>F. elastica</i> (Roxb.)	241
10.7	<i>F. glomerata</i> Roxb. (Syn: <i>F. racemose</i> L.)	241
10.8	<i>F. infectoria</i> Miq. (Syn: <i>F. virens</i>)	242
10.9	<i>F. lyrata</i> Warb. (Syn: <i>F. sycomorus</i>)	245
10.10	<i>F. macrophylla</i> L.	245
10.11	<i>F. religiosa</i> L.	247
10.12	<i>F. retusa</i> L. (Syn <i>F. microcarpa</i>)	249
	References.	251

11	Nuts and Their Nutritive and Medicinal Value	255
11.1	Introduction	255
11.2	An Account of Medicinal Properties of Some Nuts.	255
11.3	<i>Anacardium occidentale</i> L.	256
11.4	<i>Juglans regia</i> L.	258
11.5	<i>Pistacia vera</i> L.	259
11.6	<i>Prunus amygdalus</i> L. Batsch	260
	References.	263
12	Medicinally Important Edible Fruits	267
12.1	Introduction	267
12.2	Medicinal Properties of Important Fruits.	267
12.3	<i>Citrus x sinensis</i> L.	270
12.4	<i>Citrus x limon</i> L.	272
12.5	<i>Malus domestica</i> L.	276
12.6	<i>Mangifera indica</i> L.	279
12.7	<i>Prunus persica</i> L. Batsch.	280
12.8	<i>Psidium guajava</i> L.	283
12.9	<i>Punica granatum</i> L.	286
12.10	<i>Phoenix dactylifera</i> L.	289
	References.	291
	Index	297