

Angiosperms diversity of Peddagattu and Sherepally area: a proposed site for Uranium Mining Project, Nalgonda District, Telangana State, India

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ABSTRACT

The present study was carried out in order to explore the floristic composition in Peddagattu and Sherepally areas of Nalgonda District, Telangana State, India during the period of 2010 – 2013. A diversity of 89 tree species, 100 shrubs, 261 herbs, and 12 climbers belonging to 86 families and 322 genera in an area of 4781.35 sq. km were identified. Amongst the 86 families, Fabaceae, Poaceae, Malvaceae, Apocynaceae and Asteraceae dominate the area investigated. The present study highlights presence of a rich biodiversity in the Peddagath and sherepally areas of Nalgonda District, Telangana, south India, which has been a proposed site for mining uranium.

Key-words: Angiosperms diversity, Nalgonda District, Uranium mining project

INTRODUCTION

Angiosperms play an important role in sustainable management by maintaining biodiversity and conserving the environment (Ganorkar & Kshirsagar 2013). Diversity studies are necessary for fundamental research in tropical ecology, such as modeling patterns of species diversity or understanding species distributions (Phillips et al. 2003, Jayakumar et al. 2011).

India has a wide range of habitats ranging from tropical rainforests to alpine vegetation and temperate forests to coastal wetlands. It has four biodiversity hotspots (Eastern Himalayas, Western Ghats, Northeast India and Andaman and Nicobar Islands) that has been listed as one of the 12 mega biodiversity countries in the world (Myers 1988, Myers et al. 2000). It holds 47,000 species of flowering and non-flowering plants

representing about 12% of the world's floral assemblage. A total of 17,000 species of angiosperms, 48 species of gymnosperms has so far been listed from India (MoEF 1999). In peninsular India, a few quantitative phytodiversity inventories are available only from the forests of the Western Ghats (Ganesh et al. 1996) and Eastern Ghats (Kadavul et al. 1999a, 1999b, Jayakumar et al. 2002, Natarajan et al. 2004, Sudhakar Reddy et al. 2011). In recent years, floristic diversity studies acquire importance in response to the need of developing and under-developed countries to assess their plant wealth (Yogesh et al. 2014). In the present study, an attempt has been made to determine the diversity of angiosperms in Peddagattu and Sherepally area that has been proposed as a Uranium mining project site.

STUDY AREA

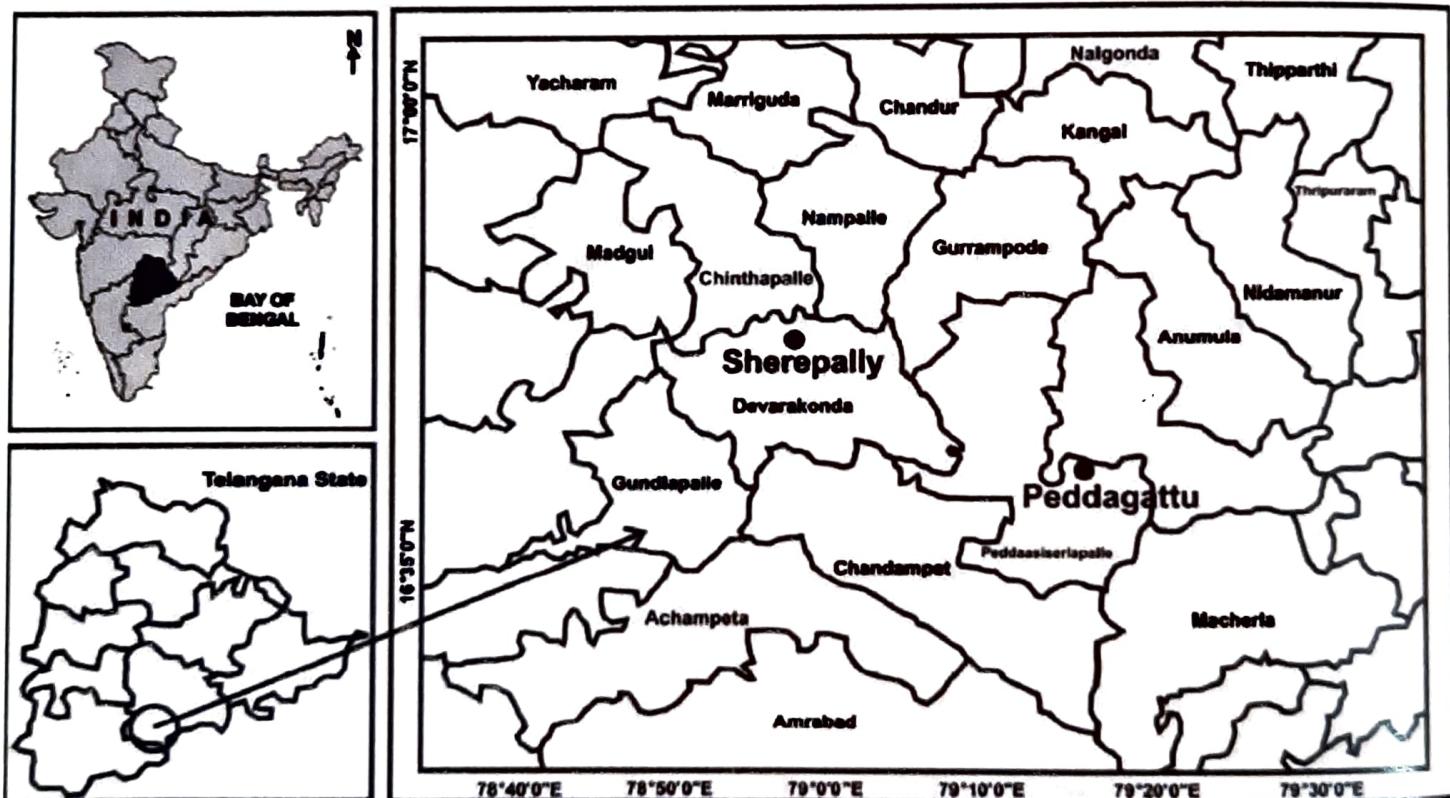
The study area lies between $16^{\circ}25'$ to $17^{\circ}00'$ N and $78^{\circ}40'$ to $78^{\circ}30'$ E and having a total area of 4781.35 sq. km. (Text-Figure 1). The study area is bordered on the north by Nalgonda District, where as the south by Guntur and parts of Mahabubnagar District. On the east the study area is bordered by Nalgonda, Guntur, and on the west by Nalgonda District. The study area forms a fragmented stretch of associated forests between NSTR and Krishna River. Physiographically, the area is flat topped hills composed of proterozoic sediments. As it is in close proximity to Nagarjunasagar Canal, majority of the area is under cultivation. The rocky exposures at the bottom of the hills are generally composed of granite. The study area is 458.54 meters asl and has a gentle slope from west and north-west to the south-east.

MATERIALS AND METHODS

The field survey for the present study was carried out from 2010 to 2013. Survey and collection of plant materials were regularly conducted during pre-and post-

monsoon seasons to obtain the maximum list of species in each habitat. Collections were made from different types of habitats that included open land, agricultural lands, rocky hills, scrub forest, and wetlands. Each plant was collected in quadruplates and relevant field data on the species regarding habit, habitat, altitude and phonology were recorded.

After cutting the twigs, they were placed in polythene bags to avoid further desiccation and to protect from withering. The collected plant specimens were dipped in saturated Mercuric Chloride in Ethyl Alcohol solution to avoid damage by insects and microbes. They were pressed and after 24 hours the pressed specimens were kept within news papers and frequently changed until fully dried. After complete drying, the specimens were stitched on 42 X 28 cm sized herbarium sheets according to the methodology described by Santapau (1955) and Jain & Rao (1977). Labels with all relevant information such as name of the plant, family, locality, altitude, date of collection, collector's name and salient notes were affixed on the right hand bottom corner of the mounted herbarium sheets.



Text-Figure 1. Location map of the study area

All the plant species were identified from the key vegetative and reproductive features by using the guide to the regional floras viz, Flora of presidency of Madras (Gamble & Fischer 1915-1935), The Flora of the Presidency of Bombay (Cook 1901-1908), Flora of Andhra Pradesh (Pullaiah et al. 1997 a, 1997 b, 1997 c), Flora of Nalgonda District (Rao et al. 2001), Flora of Guntur District (Pullaiah et al. 2000) and Flora of Telangana Sate (Pullaiah 2015). The collected specimens were deposited in Botanical survey of India, Deccan Region Center, Hyderabad (BSI/DRC/14-15/Tech./1030; L.No. 173/AINPAO/BRNS/BSI. Dated: 14.03.2014). Species names and family names were followed according to the Angiosperm Phylogeny Group III (APG III) from an open access website.

RESULT AND DISCUSSION

Four hundred and sixty two species belonging to 322 genera and 86 families of angiosperms are recorded from the present study area. Out of the 462 species, dicotyledonous plants contribute 373 species belonging to 258 genera and 72 families. The monocotyledons contribute only 89 species belonging to 64 genera and 14 families. Family Poaceae is the most dominant representative of the monocotyledons, whereas, Fabaceae is the most dominant family amongst dicotyledons.

In the entire study area, a total of 22 growth forms were recorded. Trees and small trees were grouped under tree form. Shrubs, under shrub, straggling shrub, twining shrub, scrambling shrubs, climbing shrub and shrubby climbers were considered as shrub form. Herbs, straggling herbs, climbing herbs, grass, twining herb, sedges and parasitic herbs were grouped under herb form and climbers, twiners, climbing parasites and

twining parasites were considered as climber forms. Out of the 462 species, 89 species are trees forms, 100 species are of shrubs forms, 260 species are herbs forms and 13 species are of climber forms. Four hundred and twenty four species are represented by terrestrial habitats and 38 species are represented by aquatic and marshy habitats (Table 2).

Fabaceae is the most dominant family with 68 species and 39 genera, followed by Poaceae with 54 species and 37 genera, Malvaceae with 29 species and 18 genera, Apocynaceae with 22 species and 19 genera, Asteraceae with 21 species and 20 genera, Acanthaceae with 18 species and 11 genera, Lamiaceae with 15 species and 11 genera, Convolvulaceae with 15 species and 6 genera, Cyperaceae with 13 species and 6 genera, & Euphorbiaceae with 13 species and 7 genera, Amaranthaceae with 11 species and 10 genera. The top ten families contribute 59.91 % species (278 species) of total flora recorded in study area. Out of the 86 families, 36 families are represented only by one species and 17 families are by 2 species (Table 2). It has been observed that species richness in top 10 genera (Table 2) are: *Cleome*, *Crotalaria* and *Ipomoea* (represented by 7 species each), *Cyperus*, *Euphorbia* and *Senna* (represented by 6 species each), *Acacia*, *Eragrostis*, *Justicia* and *Polygala* (represented by 5 species each).

It may be mentioned here that Sudhakar Reddy (2008) has reported 40 endemic taxa to Andhra Pradesh, amongst them 3 endemic species (*Alysicarpus mahabubnagarensis* Rao et al., *Cleome viscosa* var. *nagarjunakondensis* Sundararagh and *Chrysopogon velutinus* (Hook.f.) Bor have been recorded from the present study area.

ACKNOWLEDGMENT

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Table 1. The record of dicotyledons and monocotyledons from the Peddagattu and Sherpally areas, Nalgonda District, Telangana, south India.

Group	Families	Genera	Species
Dicotyledons (D)	72	258	373
Monocotyledons (M)	14	64	89
Total	86	322	462
D/M ratio	5.14	4.03	4.1

Table 2. Checklist of Angiosperms from Peddagattu and Sherepally areas, Nalgonda District, Telangana State, south India.

Name of the Family/ species	Habitat	Growth form	Voucher Number
Acanthaceae			
<i>Andrographis echiodoides</i> (L.f.) Nees	Terrestrial	Herb	BRNS-PG005003
<i>Andrographis paniculata</i> (Burm.f.) Nees	Terrestrial	Herb	BRNS-PG001243
<i>Barleria longiflora</i> L.f.	Terrestrial	Under Shrub	BRNS-PG001083
<i>Barleria prionitis</i> L.	Terrestrial	Under Shrub	BRNS-PG001186
<i>Blepharis maderaspatensis</i> (L.) Heyne ex Roth	Terrestrial	Herb	BRNS-PG001192
<i>Crossandra infundibuliformis</i> (L.) Nees	Terrestrial	Under Shrub	BRNS-PG005299
<i>Elytraria acaulis</i> (L.f.) Lindau	Terrestrial	Herb	BRNS-PG001171
<i>Hygrophila auriculata</i> (Schumach.) Heine	Marshy	Herb	BRNS-PG005249
<i>Justicia adhatoda</i> L.	Terrestrial	Under Shrub	BRNS-PG005273
<i>Justicia glauca</i> Rottler	Terrestrial	Under Shrub	BRNS-PG001162
<i>Justicia neesii</i> Ramamoorthy	Terrestrial	Herb	BRNS-PG005095
<i>Justicia quinqueangularis</i> Koenig ex Roxb.	Terrestrial	Under Shrub	BRNS-PG005199
<i>Justicia vahlii</i> Roth	Terrestrial	Straggling herbs	BRNS-PG001297
<i>Lepidagathis cristata</i> Willd.	Terrestrial	Herb	BRNS-PG001126
<i>Ruellia patulus</i> (Jacq.) Nees	Terrestrial	Under Shrub	BRNS-PG001082
<i>Ruellia tuberosa</i> L.	Terrestrial	Herb	BRNS-PG005312
<i>Rungia repens</i> (L.) Nees	Terrestrial	Herb	BRNS-PG001244
<i>Thunbergia fragrans</i> Roxb.	Terrestrial	Climbing Herb	BRNS-PG001256
Aizoaceae			
<i>Zaleya decandra</i> (L.) Burm.f	Terrestrial	Herb	BRNS-PG001206
Amaranthaceae			
<i>Achyranthes aspera</i> L.	Terrestrial	Herb	BRNS-PG001067
<i>Aerva lantana</i> (L.) Juss.	Terrestrial	Herb	BRNS-PG005103
<i>Allmania nodiflora</i> (L.) Br. ex Wight	Terrestrial	Herb	BRNS-PG001051
<i>Alternanthera pungens</i> . Kunth	Terrestrial	Herb	BRNS-PG 001346
<i>Amaranthus spinosus</i> L.	Terrestrial	Under Shrub	BRNS-PG005138
<i>Amaranthus viridis</i> L.	Terrestrial	Herb	BRNS-PG001160
<i>Celosia argentea</i> L.	Terrestrial	Herb	BRNS-PG001025
<i>Digera muricata</i> (L.) Mart.	Terrestrial	Herb	BRNS-PG005150
<i>Gomphrena serrata</i> L.	Terrestrial	Herb	BRNS-PG001154
<i>Pupalia lappacea</i> (L.) Juss.	Terrestrial	Herb	BRNS-PG001278
<i>Trichuriella monsoniae</i> (L. f.) Bennet	Terrestrial	Herb	BRNS-PG001003
Amaryllidaceae			
<i>Allium cepa</i> L.	Terrestrial	Herb	BRNS-PG005319
<i>Crinum viviparum</i> (Lam.) Ansari & Nair	Terrestrial	Herb	BRNS-PG001092
Anacardiaceae			
<i>Anacardium occidentale</i> L.	Terrestrial	Tree	BRNS-PG005135
<i>Mangifera indica</i> L.	Terrestrial	Tree	BRNS-PG005302
Annonaceae			
<i>Annona reticulata</i> L.	Terrestrial	Small tree	BRNS-PG005285
<i>Annona squamosa</i> L.	Terrestrial	Tree	BRNS-PG005217
<i>Polyalthia longifolia</i> (Sonn) Thw.	Terrestrial	Tree	BRNS-PG 001354
Apocynaceae			
<i>Alstonia scholaris</i> (L.) Br.	Terrestrial	Shrub	BRNS-PG005314
<i>Calotropis gigantea</i> (L.) Dryand.	Terrestrial	Shrub	BRNS-PG005280

Table 2 continued ...

<i>Calotropis procera</i> (Aiton) Dryand.	Terrestrial	Shrub	BRNS-PG005263
<i>Caralluma adscendens</i> var. <i>attenuata</i> (Wight) Grav. & Mayur.	Terrestrial	Herb	BRNS-PG001034
<i>Carissa carandas</i> L.	Terrestrial	Shrub	BRNS-PG005266
<i>Dregea volubilis</i> (L.f.) Benth. ex Hook.f.	Terrestrial	Straggling shrub	BRNS-PG005320
<i>Hemidesmus indicus</i> (L.) Br.ex Schuult.	Terrestrial	Straggling shrub	BRNS-PG001091
<i>Nerium oleander</i> L.	Terrestrial	Shrub	BRNS-PG001018
<i>Oxystelma esculentum</i> (L. f.) Sm.	Terrestrial	Twining herb	BRNS-PG001006
<i>Pergularia daemia</i> (Forssk.) Chiov.	Terrestrial	Climber	BRNS-PG001013
<i>Plumeria alba</i> L.	Terrestrial	Tree	BRNS-PG 005333
<i>Plumeria rubra</i> L.	Terrestrial	Tree	BRNS-PG 001353
<i>Aganosma dichotoma</i> Schum.	Terrestrial	Climber	BRNS-PG001140
<i>Cascabela thevetia</i> (L.) Lip.	Terrestrial	Small tree	BRNS-PG005278
<i>Catharanthus pusillus</i> (Murray) Don	Terrestrial	Herb	BRNS-PG001072
<i>Catharanthus roseus</i> (L.) Don	Terrestrial	Herb	BRNS-PG005235
<i>Cryptostegia grandiflora</i> Roxb ex Br.	Terrestrial	Shrub	BRNS-PG001004
<i>Decalepis hamiltonii</i> Wight & Arn.	Terrestrial	Straggling shrub	BRNS-PG005320
<i>Pentatropis capensis</i> (L. f.) Bullock	Terrestrial	Twining shrub	BRNS-PG001254
<i>Sarcostemma acidum</i> (Roxb.) Voigt	Terrestrial	Climbing shrub	BRNS-PG001102
<i>Tabernaemontana divaricata</i> (L.) Br. ex Roem. & Schult.	Terrestrial	Shrub	BRNS-PG005125
<i>Wrightia tinctoria</i> Br.	Terrestrial	Tree	BRNS-PG001024
Aponogetonaceae			
<i>Aponogeton natans</i> (L.) Engl. & Krause	Aquatic	Herb	BRNS-PG005215
Araceae			
<i>Pistia stratiotes</i> L.	Aquatic	Aquatic herb	BRNS-PG 001352
Arecaceae			
<i>Borassus flabellifer</i> L.	Terrestrial	Tree	BRNS-PG005197
<i>Cocos nucifera</i> L.	Terrestrial	Tree	BRNS-PG005297
<i>Phoenix sylvestris</i> (L.) Roxb.	Terrestrial	Tree	BRNS-PG005203
Aristolochiaceae			
<i>Aristolochia indica</i> L.	Terrestrial	Twiner	BRNS-PG001070
Asparagaceae			
<i>Agave americana</i> L.	Terrestrial	Shrub	BRNS-PG005284
<i>Asparagus racemosus</i> Willd.	Terrestrial	Straggling shrub	BRNS-PG 001347
<i>Chlorophytum tuberosum</i> (Roxb.) Baker	Terrestrial	Herb	BRNS-PG001315
<i>Sansevieria roxburghiana</i> Schult. & Schult.f	Terrestrial	Herb	BRNS-PG001199
Bignoniaceae			
<i>Millingtonia hortensis</i> L.f.	Terrestrial	Tree	BRNS-PG005322
<i>Spathodea campanulata</i> Beauv.	Terrestrial	Tree	BRNS-PG005317
<i>Tecoma stans</i> (L.) Juss. ex Kunth	Terrestrial	Small tree	BRNS-PG005250
<i>Dolichandrone falcata</i> (Wall. ex DC.) Seem.	Terrestrial	Tree	BRNS-PG001189
Boraginaceae			
<i>Cordia dichotoma</i> Forst	Terrestrial	Tree	BRNS-PG001233
<i>Ehretia aspera</i> Willd.	Terrestrial	Tree	BRNS-PG001323
<i>Ehretia pubescens</i> Benth.	Terrestrial	Tree	BRNS-PG001153
<i>Heliotropium indicum</i> L.	Terrestrial	Herb	BRNS-PG005248
<i>Heliotropium zeylanicum</i> (Burm.f.) Lam.	Terrestrial	Herb	BRNS-PG001060
<i>Heliotropium ovalifolium</i> Forssk.	Terrestrial	Herb	BRNS-PG001322

Table 2 continued ...

<i>Trichodesma indicum</i> (L.) Lehm.	Terrestrial	Herb	BRNS-PG001056
<i>Trichodesma zeylanicum</i> (Burm.) Br.	Terrestrial	Herb	BRNS-PG001229
Cactaceae			
<i>Cereus pterogonus</i> Lam.	Terrestrial	Shrub	BRNS-PG005316
<i>Opuntia dillenii</i> (Ker Gawl.) Haw.	Terrestrial	Shrub	BRNS-PG 005331
<i>Opuntia elatior</i> Mill.	Terrestrial	Shrub	BRNS-PG 001351
Cannaceae			
<i>Canna indica</i> L.	Terrestrial	Herb	BRNS-PG005295
Capparaceae			
<i>Cadaba fruticosa</i> (L.) Druce.	Terrestrial	Shrub	BRNS-PG005274
<i>Capparis sepiaria</i> L.	Terrestrial	Shrub	BRNS-PG001246
<i>Maerua apetala</i> (Spreng.) Jacobs	Terrestrial	Tree	BRNS-PG001232
<i>Maerua oblongifolia</i> (Forssk.) Rich	Terrestrial	Straggling shrub	BRNS-PG001022
Caricaceae			
<i>Carica papaya</i> L.	Terrestrial	Tree	BRNS-PG005282
Caryophyllaceae			
<i>Polycarpha corymbosa</i> (L.) Lam.	Terrestrial	Herb	BRNS-PG001065
Casuarinaceae			
<i>Casuarina equisetifolia</i> L.	Terrestrial	Tree	BRNS-PG005201
Celastraceae			
<i>Gymnosporia emarginata</i> (Willd.) Thwaites	Terrestrial	Shrub	BRNS-PG005251
Cleomaceae			
<i>Cleome aspera</i> Koenig ex DC.	Terrestrial	Herb	BRNS-PG001099
<i>Cleome chelidonii</i> L.f.	Terrestrial	Herb	BRNS-PG 001348
<i>Cleome felina</i> L.f	Terrestrial	Herb	BRNS-PG001058
<i>Cleome gynandra</i> L.	Terrestrial	Herb	BRNS-PG001236
<i>Cleome monophylla</i> L.	Terrestrial	Herb	BRNS-PG001238
<i>Cleome viscosa</i> L.	Terrestrial	Herb	BRNS-PG001066
<i>Cleome viscosa</i> var. <i>nagarjunakondensis</i> Sundararagh.	Terrestrial	Herb	BRNS-PG005056
Colchicaceae			
<i>Gloriosa superba</i> L.	Terrestrial	Climber	BRNS-PG005202
Combretaceae			
<i>Terminalia arjuna</i> (Roxb. ex DC.) Wight & Arn.	Terrestrial	Tree	BRNS-PG005262
<i>Terminalia catappa</i> L.	Terrestrial	Tree	BRNS-PG005298
Commelinaceae			
<i>Cyanotis axillaris</i> (L.) Don ex Sweet	Marshy	Herb	BRNS-PG005224
<i>Commelina benghalensis</i> L.	Terrestrial	Herb	BRNS-PG001044
<i>Commelina longifolia</i> Lam.	Terrestrial	Herb	BRNS-PG005137
Asteraceae			
<i>Acanthospermum hispidum</i> DC.	Terrestrial	Herb	BRNS-PG001168
<i>Acmella paniculata</i> (Wall. ex DC.) Jansen	Terrestrial	Herb	BRNS-PG001274
<i>Ageratum conyzoides</i> (L.) L.	Terrestrial	Herb	BRNS-PG005200
<i>Bidens pilosa</i> L.	Terrestrial	Herb	BRNS-PG001213
<i>Blainvillea acmella</i> (L.) Philipson	Terrestrial	Herb	BRNS-PG001166
<i>Cyanthillium albicans</i> (DC.) Rob.	Terrestrial	Herb	BRNS-PG001112
<i>Cyanthillium cinereum</i> (L.) Rob.	Terrestrial	Herb	BRNS-PG005005
<i>Echinops echinatus</i> Roxb.	Terrestrial	Herb	BRNS-PG001338
<i>Eclipta prostrata</i> (L.) L.	Terrestrial	Herb	BRNS-PG001037

Table 2 continued ...

<i>Erigeron trilobus</i> (Decne.) Boiss	Terrestrial	Herb	BRNS-PG005324
<i>Glossocardia bosvallia</i> (L.f.) DC.	Terrestrial	Herb	BRNS-PG005086
<i>Grangea maderaspatana</i> (L.) Desf.	Terrestrial	Herb	BRNS-PG 005329
<i>Lagascea mollis</i> Cav.	Terrestrial	Herb	BRNS-PG001251
<i>Oligochaeta ramosa</i> Wagenitz	Terrestrial	Herb	BRNS-PG001008
<i>Parthenium hysterophorus</i> L.	Terrestrial	Herb	BRNS-PG001200
<i>Pentanema indicum</i> (L.) Ling	Terrestrial	Herb	BRNS-PG001307
<i>Pulicaria wightiana</i> (DC.) Clarke	Terrestrial	Herb	BRNS-PG001269
<i>Sonchus oleraceus</i> (L.) L.	Terrestrial	Herb	BRNS-PG001291
<i>Sphaeranthus indicus</i> Linn.	Terrestrial	Herb	BRNS-PG005286
<i>Tridax procumbens</i> (L.) L.	Terrestrial	Herb	BRNS-PG001177
<i>Xanthium strumarium</i> L.	Terrestrial	Under Shrub	BRNS-PG 005335
Convolvulaceae			
<i>Evolvulus alsinoides</i> (L.) L	Terrestrial	Herb	BRNS-PG001014
<i>Ipomea carnea</i> Jacq.	Marshy	Shrub	BRNS-PG001118
<i>Ipomoea aquatica</i> Forssk.	Aquatic	Aquatic twiner	BRNS-PG005271
<i>Ipomoea pes-tigridis</i> L.	Terrestrial	Twining herb	BRNS-PG001260
<i>Ipomoea quamoclit</i> L.	Terrestrial	Twining herb	BRNS-PG001242
<i>Merremia aegyptia</i> (L.) Urb.	Terrestrial	Twining herb	BRNS-PG001095
<i>Merremia emarginata</i> (Burm.f) Hallierf.	Marshy	Twining herb	BRNS-PG005225
<i>Merremia hederacea</i> (Burm. f.) Hallier f.	Terrestrial	Twining herb	BRNS-PG001061
<i>Rivea hypocarteriformis</i> Choisy.	Terrestrial	Twining herb	BRNS-PG001277
<i>Cuscuta chinensis</i> Lam.	Terrestrial	Climbing Parasites	BRNS-PG005159
<i>Ipomea obscura</i> (L.) Ker. Gawl.	Terrestrial	Twining herb	BRNS-PG001109
<i>Ipomoea hederifolia</i> L.	Terrestrial	Twining herb	BRNS-PG001335
<i>Ipomoea nil</i> (L.) Roth.	Terrestrial	Twining shrub	BRNS-PG001165
<i>Merremia tridentata</i> (L.) Hallier f.	Terrestrial	Twining herb	BRNS-PG001146
Cornaceae			
<i>Alangium salviifolium</i> (L.f.) Wangerin	Terrestrial	Small tree	BRNS-PG005207
Cucurbitaceae			
<i>Corallocarpus epigaeus</i> (Rottler) Hook.f.	Terrestrial	Straggling shrub	BRNS-PG001257
<i>Ctenolepis garcini</i> (L.) Clarke	Terrestrial	Twining herb	BRNS-PG001263
<i>Momordica dioica</i> Roxb. ex Willd.	Terrestrial	Twining herb	BRNS-PG001194
<i>Mukia maderaspatana</i> (L.) Roem.	Terrestrial	Twining herb	BRNS-PG001265
<i>Citrullus colocynthis</i> (L.) Schrad.	Terrestrial	Twining herb	BRNS-PG001094
<i>Coccinia grandis</i> (L.) Voigt.	Terrestrial	Twining herb	BRNS-PG005013
<i>Diplocyclos palmatus</i> (L.) Jeff.	Terrestrial	Twining herb	BRNS-PG001144
<i>Luffa acutangula</i> (L.) Roxb.	Terrestrial	Twining herb	BRNS-PG001219
Cyperaceae			
<i>Bolboschoenus maritimus</i> (L.) Palla	Terrestrial	Herb	BRNS-PG001086
<i>Bulbostylis barbata</i> (Hb.) Clarke	Terrestrial	Herb	BRNS-PG001115
<i>Cyperus clarkei</i> T.Cooke	Marshy	Herb	BRNS-PG001114
<i>Cyperus compressus</i> L.	Marshy	Herb	BRNS-PG005080
<i>Cyperus diffomis</i> L.	Marshy	Herb	BRNS-PG001117
<i>Cyperus haspan</i> L.	Marshy	Herb	BRNS-PG001131
<i>Cyperus iria</i> L.	Marshy	Herb	BRNS-PG001110
<i>Cyperus rotundus</i> L.	Marshy	Herb	BRNS-PG001205
<i>Eleocharis geniculata</i> (L.) Roem. & Schult.	Marshy	Herb	BRNS-PG001045
<i>Fimbristylis dichotoma</i> (L.) Vahl	Marshy	Herb	BRNS-PG001129

Table 2 continued ...

<i>Fimbristylis ferruginea</i> (L) Vahl	Marshy	Herb	BRNS-PG001130
<i>Fimbristylis littoralis</i> Gaudich.	Marshy	Herb	BRNS-PG001080
<i>Kyllinga triceps</i> Rottb.	Marshy	Herb	BRNS-PG005054
Ebenaceae			
<i>Diospyros chloroxylon</i> Roxb.	Terrestrial	Small tree	BRNS-PG005256
<i>Diospyros melanoxylon</i> Roxb.	Terrestrial	Small tree	BRNS-PG005318
Euphorbiaceae			
<i>Acalypha alnifolia</i> Klein ex Willd.	Terrestrial	Under Shrub	BRNS-PG001046
<i>Acalypha indica</i> L.	Terrestrial	Herb	BRNS-PG001042
<i>Jatropha curcas</i> L.	Terrestrial	Shrub	BRNS-PG005303
<i>Jatropha glandulifera</i> Roxb.	Terrestrial	Shrub	BRNS-PG005219
<i>Chrozophora rottoneri</i> (Geiseler) Juss. ex Spreng.	Terrestrial	Herb	BRNS-PG001207
<i>Croton bonplandianus</i> Baill.	Terrestrial	Shrub	BRNS-PG005304
<i>Euphorbia antiquorum</i> L.	Terrestrial	Under Shrub	BRNS-PG 005327
<i>Euphorbia caducifolia</i> Haines	Terrestrial	Herb	BRNS-PG001145
<i>Euphorbia heterophylla</i> L.	Terrestrial	Herb	BRNS-PG001038
<i>Euphorbia hirta</i> L.	Terrestrial	Herb	BRNS-PG005106
<i>Euphorbia hypericifolia</i> L.	Terrestrial	Shrub	BRNS-PG001089
<i>Euphorbia tirucalli</i> L.	Terrestrial	Herb	BRNS-PG005111
<i>Microstachys chamaelea</i> (L.) Müll.Arg.	Terrestrial		
Gentianaceae			
<i>Conscora diffusa</i> (Vahl) Br.ex Roem & Schult	Terrestrial	Herb	BRNS-PG001141
Hernandiaceae			
<i>Gyrocarpus americanus</i> Jacq.	Terrestrial	Tree	BRNS-PG001235
Hydrocharitaceae			
<i>Hydrolea zeylanica</i> (L.) Vahl	Marshy	Herb	BRNS-PG005292
<i>Ottelia alismoides</i> (L.) Pers.	Aquatic	Herb	BRNS-PG001258
Lamiaceae			
<i>Anisochilus carnosus</i> (L.f.) Wall.	Marshy	Herb	BRNS-PG001185
<i>Anisomeles indica</i> (L.) Kuntze	Terrestrial	Herb	BRNS-PG005293
<i>Anisomeles malabarica</i> (L.) Br. ex Sims.	Terrestrial	Herb	BRNS-PG001077
<i>Clerodendrum phlomidis</i> L.f.	Terrestrial	Shrub	BRNS-PG001016
<i>Gmelina asiatica</i> L.	Terrestrial	Shrub	BRNS-PG001049
<i>Hyptis suaveolens</i> (L.) Poit.	Terrestrial	Under Shrub	BRNS-PG001180
<i>Leonotis nepetifolia</i> (L.) Br.	Terrestrial	Herb	BRNS-PG005272
<i>Leucas aspera</i> (Willd.) Link	Terrestrial	Herb	BRNS-PG001075
<i>Leucas lamiafolia</i> Desf.	Terrestrial	Herb	BRNS-PG001301
<i>Leucas zeylanica</i> (L.) Aiton	Terrestrial	Herb	BRNS-PG001063
<i>Ocimum americanum</i> L.	Terrestrial	Herb	BRNS-PG001313
<i>Premna latifolia</i> Roxb.	Terrestrial	Tree	BRNS-PG001202
<i>Tectona grandis</i> L.f.	Terrestrial	Tree	BRNS-PG005216
<i>Vitex leucoxylon</i> L. f.	Terrestrial	Tree	BRNS-PG001336
<i>Vitex negundo</i> L.	Terrestrial	Shrub	BRNS-PG001020
Lauraceae			
<i>Cassytha filiformis</i> L.	Terrestrial	Twining parasite	BRNS-PG001149
Lecythidaceae			
<i>Barringtonia acutangula</i> (L.) Gaertn.	Terrestrial	Tree	BRNS-PG005208
Fabaceae			
<i>Abrus precatorius</i> L.	Terrestrial	Twiner	BRNS-PG001152

Table 2 continued ...

<i>Acacia auriculiformis</i> Benth.	Terrestrial	Tree	BRNS-PG001217
<i>Acacia ferruginea</i> DC.	Terrestrial	Tree	BRNS-PG001314
<i>Acacia leucophloea</i> (Roxb.) Willd.	Terrestrial	Tree	BRNS-PG001328
<i>Acacia nilotica</i> (L.) Delile	Terrestrial	Tree	BRNS-PG001019
<i>Acacia torta</i> (Roxb.) Craib	Terrestrial	Straggling shrub	BRNS-PG005306
<i>Aeschynomene indica</i> L.	Marshy	Herb	BRNS-PG001159
<i>Albizia amara</i> (Roxb.) Boivin	Terrestrial	Tree	BRNS-PG001196
<i>Albizia saman</i> (Jacq.) Merr.	Terrestrial	Tree	BRNS-PG005268
<i>Albizia lebbeck</i> (L.) Benth.	Terrestrial	Tree	BRNS-PG001027
<i>Alysicarpus hamosus</i> Edgew.	Terrestrial	Herb	BRNS-PG001264
<i>Alysicarpus mahabubnagarensis</i> Rao et al.	Terrestrial	Herb	BRNS-PG001164
<i>Bauhinia acuminata</i> L.	Terrestrial	Shrub	BRNS-PG005205
<i>Bauhinia purpurea</i> L.	Terrestrial	Tree	BRNS-PG005230
<i>Butea monosperma</i> (Lam.) Taub.	Terrestrial	Tree	BRNS-PG005274
<i>Caesalpinia bonduc</i> (L.) Roxb.	Terrestrial	Shrub	BRNS-PG001026
<i>Caesalpinia pulcherrima</i> (L.) Sw.	Terrestrial	Shrub	BRNS-PG005196
<i>Cajanus scarabaecoides</i> (L.) Thouars	Terrestrial	Herb	BRNS-PG001225
<i>Canavalia gladiata</i> (Jacq.) DC	Terrestrial	Twining shrub	BRNS-PG001333
<i>Cassia fistula</i> L.	Terrestrial	Tree	BRNS-PG005257
<i>Cassia roxburghii</i> DC.	Terrestrial	Small tree	BRNS-PG001218
<i>Chamaecrista absus</i> (L.) Irwin & Barneby	Terrestrial	Herb	BRNS-PG001169
<i>Chamaecrista pumila</i> (Lam.) Larsen	Terrestrial	Herb	BRNS-PG001212
<i>Clitoria ternatea</i> L.	Terrestrial	Twining herb	BRNS-PG001057
<i>Crotalaria hebecarpa</i> (DC.) Rudd	Terrestrial	Herb	BRNS-PG001098
<i>Crotalaria lunulata</i> Wight & Arn.	Terrestrial	Under Shrub	BRNS-PG001305
<i>Crotalaria ramosissima</i> Roxb.	Terrestrial	Herb	BRNS-PG001093
<i>Crotalaria retusa</i> L.	Terrestrial	Herb	BRNS-PG 001349
<i>Crotalaria verrucosa</i> L.	Terrestrial	Under Shrub	BRNS-PG001081
<i>Crotalaria bifaria</i> L.f.	Terrestrial	Herb	BRNS-PG001139
<i>Crotalaria laburnifolia</i> L.	Terrestrial	Shrub	BRNS-PG001068
<i>Dalbergia sissoo</i> DC.	Terrestrial	Tree	BRNS-PG001029
<i>Delonix elata</i> (L.) Gamble	Terrestrial	Tree	BRNS-PG005323
<i>Delonix regia</i> (Hook.) Raf.	Terrestrial	Tree	BRNS-PG001036
<i>Desmodium gangeticum</i> (L.) DC.	Terrestrial	Herb	BRNS-PG005305
<i>Dichrostachys cinerea</i> (L.) Wight & Arn	Terrestrial	Shrub	BRNS-PG001340
<i>Gliricidia sepium</i> (Jacq.) Kunth ex Walp.	Terrestrial	Small tree	BRNS-PG 005328
<i>Hardwickia binata</i> Roxb.	Terrestrial	Tree	BRNS-PG001032
<i>Indigofera astragalina</i> Dc.	Terrestrial	Under Shrub	BRNS-PG001107
<i>Indigofera colutea</i> (Burm.f.) Merr.	Terrestrial	Shrub	BRNS-PG001286
<i>Indigofera linifolia</i> (L.f.) Retz.	Terrestrial	Herb	BRNS-PG001002
<i>Leucaena leucocephala</i> (Lam.) de Wit	Terrestrial	Tree	BRNS-PG005221
<i>Mimosa prainiana</i> Gamble	Terrestrial	Straggling shrub	BRNS-PG001290
<i>Mimosa pudica</i> L.	Terrestrial	Herb	BRNS-PG005220
<i>Mundulea sericea</i> (Willd.) Chev	Terrestrial	Shrub	BRNS-PG001043
<i>Neptunia oleracea</i> Lour.	Aquatic	Herb	BRNS-PG005130
<i>Parkinsonia aculeata</i> L.	Terrestrial	Small tree	BRNS-PG001220
<i>Peltophorum pterocarpum</i> (DC.) Heyne	Terrestrial	Tree	BRNS-PG001028
<i>Pithecellobium dulce</i> (Roxb.) Benth.	Terrestrial	Tree	BRNS-PG005229
<i>Pongamia pinnata</i> (L.) Pierre	Terrestrial	Tree	BRNS-PG001035

Table 2 continued ...

<i>Prosopis juliflora</i> (Sw.) DC.	Terrestrial	Small tree	BRNS-PG005279
<i>Rhynchosia capitata</i> (Roth) DC.	Terrestrial	Climber	BRNS-PG001262
<i>Rhynchosia suaveolens</i> (L.f.) DC.	Terrestrial	Under Shrub	BRNS-PG001255
<i>Saraca asoca</i> (Roxb.) Willd	Terrestrial	Tree	BRNS-PG001203
<i>Senna auriculata</i> (L.) Roxb.	Terrestrial	Shrub	BRNS-PG001230
<i>Senna italica</i> Mill	Terrestrial	Under Shrub	BRNS-PG005160
<i>Senna obtusifolia</i> (L.) Irwin & Barneby	Terrestrial	Under Shrub	BRNS-PG001167
<i>Senna occidentalis</i> (L.) Link	Terrestrial	Under Shrub	BRNS-PG001011
<i>Senna siamea</i> (Lam.) Irwin & Barneby	Terrestrial	Tree	BRNS-PG001345
<i>Senna uniflora</i> (Mill.) Irwin & Barneby	Terrestrial	Herb	BRNS-PG005258
<i>Sesbania sesban</i> (L.) Merr.	Terrestrial	Shrub	BRNS-PG001211
<i>Stylosanthos fruticosa</i> (Retz.) Alst.	Terrestrial	Under Shrub	BRNS-PG005109
<i>Tamarindus indica</i> L.	Terrestrial	Tree	BRNS-PG005287
<i>Tephrosia purpurea</i> (L.) Pers.	Terrestrial	Under Shrub	BRNS-PG001059
<i>Tephrosia villosa</i> (L.) Pers.	Terrestrial	Herb	BRNS-PG001163
<i>Tephrosia pumila</i> (Lam.) Pers.	Terrestrial	Herb	BRNS-PG001190
<i>Vigna aconitifolia</i> (Jacq.) Marechal	Terrestrial	Twining herb	BRNS-PG001284
<i>Zornia gibbosa</i> Span.	Terrestrial	Herb	BRNS-PG001334
Loganiaceae			
<i>Strychnos nux-vomica</i> L.	Terrestrial	Tree	BRNS-PG005260
Loranthaceae			
<i>Dendrophthoe falcata</i> (L.f) Ett.	Terrestrial	Climbing Parasites	BRNS-PG005277
Lythraceae			
<i>Ammannia baccifera</i> L.	Marshy	Herb	BRNS-PG005067
<i>Lagerstroemia speciosa</i> (L.) Pers.	Terrestrial	Tree	BRNS-PG001227
<i>Lawsonia inermis</i> L.	Terrestrial	Small tree	BRNS-PG005264
<i>Nesaea brevipes</i> Koehne	Terrestrial	Herb	BRNS-PG001253
<i>Punica granatum</i> L.	Terrestrial	Small tree	BRNS-PG005283
Malvaceae			
<i>Abutilon indicum</i> (L.) Sweet	Terrestrial	Under Shrub	BRNS-PG005311
<i>Abutilon pannosum</i> (Forst.) Schldl.	Terrestrial	Shrub	BRNS-PG001249
<i>Corchorus aestuans</i> L.	Terrestrial	Herb	BRNS-PG005169
<i>Corchorus olitorius</i> L.	Terrestrial	Under Shrub	BRNS-PG001062
<i>Corchorus tridens</i> L.	Terrestrial	Under Shrub	BRNS-PG001209
<i>Corchorus urticifolius</i> Wight & Arn.	Terrestrial	Herb	BRNS-PG001216
<i>Firmiana simplex</i> (L.) Wight	Terrestrial	Tree	BRNS-PG005267
<i>Grewia hirsuta</i> Vahl.	Terrestrial	Shrub	BRNS-PG001283
<i>Grewia rotundifolia</i> Juss.	Terrestrial	Shrub	BRNS-PG001174
<i>Helicteres isora</i> L.	Terrestrial	Tree	BRNS-PG001040
<i>Herissantia crispa</i> (L.) Brizicky	Terrestrial	Herb	BRNS-PG001259
<i>Hibiscus lobatus</i> (Murray) Kuntze	Terrestrial	Herb	BRNS-PG001321
<i>Hibiscus micranthus</i> L.f.	Terrestrial	Shrub	BRNS-PG001148
<i>Malvastrum coromandelianum</i> (L.) Garcke	Terrestrial	Herb	BRNS-PG001223
<i>Melhania incana</i> B.Heyne ex Wall.	Terrestrial	Herb	BRNS-PG001100
<i>Melhania hamiltoniana</i> Wall.	Terrestrial	Shrub	BRNS-PG001142
<i>Melochia corchorifolia</i> L.	Terrestrial	Herb	BRNS-PG005218
<i>Pavonia odorata</i> Willd.	Terrestrial	Herb	BRNS-PG 005332
<i>Pavonia zeylanica</i> Cav.	Terrestrial	Under Shrub	BRNS-PG001124
<i>Sida acuta</i> Burm.f.	Terrestrial	Herb	BRNS-PG001183

Table 2 continued ...

<i>Sida cordifolia</i> L.	Terrestrial	Under Shrub	BRNS-PG001151
<i>Sida mysorensis</i> Wight & Arn.	Terrestrial	Under Shrub	BRNS-PG001128
<i>Sida spinosa</i> L.	Terrestrial	Herb	BRNS-PG001224
<i>Sterculia foetida</i> L.	Terrestrial	Tree	BRNS-PG005321
<i>Thespesia populnea</i> (L.) Sol. ex Corrêa	Terrestrial	Small tree	BRNS-PG001197
<i>Triumfetta pentandra</i> Jocq.	Terrestrial	Herb	BRNS-PG001324
<i>Urena lobata</i> L.	Terrestrial	Shrub	BRNS-PG005270
<i>Waltheria indica</i> L.	Terrestrial	Herb	BRNS-PG001282
<i>Ceiba pentandra</i> (L.) Gaertn	Terrestrial	Tree	BRNS-PG001342
Martyniaceae			
<i>Martynia annua</i> L.	Terrestrial	Under Shrub	BRNS-PG005213
Meliaceae			
<i>Azadirachta indica</i> Juss.	Terrestrial	Tree	BRNS-PG001031
Menispermaceae			
<i>Cissampelos pareira</i> L.	Terrestrial	Shrubby climber	BRNS-PG001143
<i>Coccculus hirsutus</i> (L.) Theob.	Terrestrial	Climber	BRNS-PG001122
<i>Stephania japonica</i> (Thunb.) Miers	Terrestrial	Climber	BRNS-PG001076
<i>Tinospora cordifolia</i> (Willd.) Miers	Terrestrial	Shrubby climber	BRNS-PG001187
Molluginaceae			
<i>Glinus lotoides</i> L.	Terrestrial	Herb	BRNS-PG001015
<i>Glinus oppositifolius</i> (L.) Aug.DC.	Terrestrial	Herb	BRNS-PG001125
<i>Mollugo nudicaulis</i> Lam.	Terrestrial	Herb	BRNS-PG005063
<i>Mollugo pentaphylla</i> L.	Terrestrial	Herb	BRNS-PG001001
Moraceae			
<i>Ficus benghalensis</i> L.	Terrestrial	Tree	BRNS-PG005310
<i>Ficus hispida</i> L.f.	Terrestrial	Small tree	BRNS-PG005236
<i>Ficus mollis</i> Vahl	Terrestrial	Tree	BRNS-PG001195
<i>Ficus religiosa</i> L.	Terrestrial	Tree	BRNS-PG005281
<i>Streblus asper</i> Lour.	Terrestrial	Shrub	BRNS-PG005308
Moringaceae			
<i>Moringa oleifera</i> Lam.	Terrestrial	Tree	BRNS-PG005222
Musaceae			
<i>Musa X paradisiaca</i> L.	Terrestrial	Shrub	BRNS-PG005296
Myrtaceae			
<i>Eucalyptus globulus</i> Labill.	Terrestrial	Tree	BRNS-PG005301
<i>Psidium guajava</i> L.	Terrestrial	Small tree	BRNS-PG005233
<i>Syzygium cumini</i> (L.) Skeels	Terrestrial	Tree	BRNS-PG005234
Nelumbonaceae			
<i>Nelumbo nucifera</i> Gaertn.	Aquatic	Herb	BRNS-PG005126
Nyctaginaceae			
<i>Boerhavia diffusa</i> L.	Terrestrial	Herb	BRNS-PG001048
<i>Boerhavia erecta</i> L.	Terrestrial	Herb	BRNS-PG001304
<i>Bougainvillea spectabilis</i> Willd.	Terrestrial	Shrub	BRNS-PG005288
<i>Pisonia aculeata</i> L.	Terrestrial	Straggling shrub	BRNS-PG005309
Nymphaeaceae			
<i>Nymphaea nouchali</i> Burm. f.	Aquatic	Herb	BRNS-PG005132
<i>Nymphaea pubescens</i> Willd	Aquatic	Herb	BRNS-PG005131
Oleaceae			
<i>Jasminum articulatum</i> vahl	Terrestrial	Shrub	BRNS-PG001017

Table 2 continued ...

<i>Nyctanthes arbor-tristis</i> L.	Terrestrial	Shrub	BRNS-PG001234
Onagraceae			
<i>Ludwigia adscendens</i> (L.) Hara	Aquatic	Herb	BRNS-PG005194
<i>Ludwigia perennis</i> L.	Terrestrial	Herb	BRNS-PG001078
Orobanchaceae			
<i>Striga angustifolia</i> (Don) Saldanha	Terrestrial	Herb	BRNS-PG001085
<i>Striga asiatica</i> (L.) Kuntze	Terrestrial	Parasitic herb	BRNS-PG001303
<i>Striga gesnerioides</i> (Willd.) Vatke	Terrestrial	Parasitic herb	BRNS-PG001268
Pandanaceae			
<i>Pandanus odorifer</i> (Forssk.) Kuntze	Marshy	Shrub	BRNS-PG005291
Papaveraceae			
<i>Argemone mexicana</i> L.	Terrestrial	Herb	BRNS-PG001215
Passifloraceae			
<i>Passiflora foetida</i> L.	Terrestrial	Climber	BRNS-PG001161
Pedaliaceae			
<i>Pedalium murex</i> L.	Terrestrial	Herb	BRNS-PG001101
<i>Sesamum indicum</i> L.	Terrestrial	Herb	BRNS-PG001050
Phyllanthaceae			
<i>Bridelia montana</i> (Roxb.) Willd.	Terrestrial	Shrub	BRNS-PG005255
<i>Flueggea leucopyrus</i> Wild.	Terrestrial	Shrub	BRNS-PG001030
<i>Phyllanthus amarus</i> Schumach. & Thonn.	Terrestrial	Herb	BRNS-PG001064
<i>Phyllanthus maderaspatensis</i> L.	Terrestrial	Herb	BRNS-PG001111
<i>Phyllanthus reticulatus</i> Poir.	Terrestrial	Shrub	BRNS-PG001344
<i>Phyllanthus virgatus</i> Forst.	Terrestrial	Herb	BRNS-PG001121
Plantaginaceae			
<i>Bacopa monnieri</i> (L.) Wettst.	Marshy	Herb	BRNS-PG001158
<i>Scoparia dulcis</i> L.	Terrestrial	Herb	BRNS-PG005259
Plumbaginaceae			
<i>Plumbago zeylanica</i> L.	Terrestrial	Shrub	BRNS-PG001010
Poaceae			
<i>Acrachne racemosa</i> (Heyne ex Roth) Ohwi	Terrestrial	Herb	BRNS-PG001311
<i>Alloteropsis cimicina</i> (L.) Stapf	Terrestrial	Herb	BRNS-PG001240
<i>Apluda mutica</i> L.	Terrestrial	Herb	BRNS-PG005052
<i>Aristida funiculata</i> Trin. & Rupr.	Terrestrial	Herb	BRNS-PG001214
<i>Aristida setacea</i> Retz.	Terrestrial	Herb	BRNS-PG001204
<i>Aristida hystrix</i> L.f.	Terrestrial	Herb	BRNS-PG005083
<i>Bambusa arundinacea</i> Bonpl	Terrestrial	Shrub	BRNS-PG 005325
<i>Bothriochloa pertusa</i> (L.) A.Camus	Terrestrial	Herb	BRNS-PG001281
<i>Brachiaria ramosa</i> (L.) Stapf	Terrestrial	Herb	BRNS-PG001247
<i>Brachiaria reptans</i> (L.) Gardner & Hubb.	Terrestrial	Herb	BRNS-PG001294
<i>Cenchrus biflorus</i> Roxb.	Terrestrial	Herb	BRNS-PG001320
<i>Chloris barbata</i> Sw.	Terrestrial	Herb	BRNS-PG001135
<i>Chrysopogon fulvus</i> (Spreng.) Chiov.	Terrestrial	Herb	BRNS-PG005146
<i>Chrysopogon velutinus</i> (Hook.f.) Bor	Terrestrial	Herb	BRNS-PG005065
<i>Coelachyrum lagopoides</i> (Burm.f.) Senaratna	Terrestrial	Herb	BRNS-PG001306
<i>Cymbopogon caesius</i> (Hook. & Arn.) Stapf	Terrestrial	Herb	BRNS-PG001270
<i>Cymbopogon citratus</i> (DC.) Stapf	Terrestrial	Herb	BRNS-PG001138
<i>Cynodon dactylon</i> (L.) Pern.	Terrestrial	Herb	BRNS-PG 001350
<i>Dactyloctenium aegyptium</i> (L.) Beauv.	Terrestrial	Herb	BRNS-PG001329

Table 2 continued ...

<i>Dactyloctenium aristatum</i> Link.	Terrestrial	Herb	BRNS-PG005037
<i>Dichanthium annulatum</i> (Forssk.) Stapf	Terrestrial	Herb	BRNS-PG001250
<i>Dichanthium foveolatum</i> (Delile) Roberty	Terrestrial	Herb	BRNS-PG005060
<i>Digitaria ciliaris</i> (Retz.) Koeler	Terrestrial	Herb	BRNS-PG001272
<i>Digitaria tomentosa</i> (Koenig ex Rottler) Henrard	Terrestrial	Herb	BRNS-PG001310
<i>Dinebra retroflexa</i> (Vahl) Panz.	Terrestrial	Herb	BRNS-PG001241
<i>Echinochloa colona</i> (L.) Link	Terrestrial	Herb	BRNS-PG001239
<i>Echinochloa crus-galli</i> (L.) Beauv.	Terrestrial	Herb	BRNS-PG005140
<i>Echinochloa stagnina</i> (Retz.) Beauv.	Terrestrial	Herb	BRNS-PG001137
<i>Eragrostiella bifaria</i> (Vahl) Bor	Terrestrial	Herb	BRNS-PG001136
<i>Eragrostiella brachyphylla</i> (Stapf) Bor.	Terrestrial	Herb	BRNS-PG001116
<i>Eragrostis atrovirens</i> (Desf.) Trin. ex Steud.	Terrestrial	Herb	BRNS-PG001261
<i>Eragrostis ciliaris</i> (L.) Br	Terrestrial	Herb	BRNS-PG005053
<i>Eragrostis japonica</i> (Thunb.) Trin.	Terrestrial	Herb	BRNS-PG005289
<i>Eragrostis tenella</i> (L.) Beauv. & Schult.	Terrestrial	Herb	BRNS-PG001331
<i>Eragrostis viscosa</i> (Retz.) Trin.	Terrestrial	Herb	BRNS-PG005071
<i>Eriochloa procera</i> (Retz.) Hubb.	Terrestrial	Herb	BRNS-PG001266
<i>Hackelochloa granularis</i> (L.) Kuntze	Terrestrial	Herb	BRNS-PG001296
<i>Ischaemum rugosum</i> Salisb.	Terrestrial	Herb	BRNS-PG001312
<i>Leptochloa fusca</i> (L.) Kunth	Terrestrial	Herb	BRNS-PG001308
<i>Melanocenchrus jacquemontii</i> Jab & Spach	Terrestrial	Herb	BRNS-PG005030
<i>Melinis repens</i> (Willd.) Zizka	Terrestrial	Herb	BRNS-PG005253
<i>Panicum curviflorum</i> Hornem.	Terrestrial	Herb	BRNS-PG005043
<i>Paspalidium flavidum</i> (Retz.) Camus	Terrestrial	Herb	BRNS-PG001279
<i>Perotis indica</i> (L.) Kuntze.	Terrestrial	Herb	BRNS-PG001295
<i>Phragmites karka</i> (Retz.) Trin. ex Steud.	Terrestrial	Herb	BRNS-PG005290
<i>Rottboellia cochinchinensis</i> (Lour.) Clayton	Terrestrial	Herb	BRNS-PG001288
<i>Saccharum spontaneum</i> L.	Terrestrial	Herb	BRNS-PG005265
<i>Setaria pumila</i> (Poir.) Roem. & Schult	Terrestrial	Herb	BRNS-PG001252
<i>Setaria verticillata</i> (L.) P. Beauv.	Terrestrial	Herb	BRNS-PG001248
<i>Tetrapogon tenellus</i> (Roxb.) Chiov.	Terrestrial	Herb	BRNS-PG001309
<i>Trachys muricata</i> (L.) Pers.	Terrestrial	Herb	BRNS-PG001276
<i>Tragus roxburghii</i> Panigrahi	Terrestrial	Herb	BRNS-PG001113
<i>Urochloa panicoides</i> Beauv.	Terrestrial	Herb	BRNS-PG001271
<i>Urochloa setigera</i> (Retz.) Stapf	Terrestrial	Herb	BRNS-PG005072
Polygalaceae			
<i>Polygala arvensis</i> Willd.	Terrestrial	Herb	BRNS-PG001097
<i>Polygala elongata</i> Klein ex Willd.	Terrestrial	Herb	BRNS-PG001300
<i>Polygala erioptera</i> DC.	Terrestrial	Herb	BRNS-PG001150
<i>Polygala javanica</i> Steud.	Terrestrial	Herb	BRNS-PG001090
<i>Polygala wightiana</i> Wahl.	Terrestrial	Herb	BRNS-PG001302
Polygonaceae			
<i>Antigonon leptopus</i> Hook. & Arn	Terrestrial	Climbing Herb	BRNS-PG001047
<i>Persicaria barbata</i> (L.) Hora	Marshy	Herb	BRNS-PG005247
<i>Persicaria glabra</i> (Willd.) Gómez	Marshy	Herb	BRNS-PG005275
<i>Polygonum plebeium</i> Br.	Marshy	Herb	BRNS-PG001103
Pontederiaceae			
<i>Eichornia crassipes</i> (Mart) Solms	Aquatic	Herb	BRNS-PG005223

Table 2 continued ...

Portulacaceae			
<i>Portulaca oleracea</i> L.	Marshy	Herb	BRNS-PG 005334
<i>Portulaca pilosa</i> L.	Marshy	Herb	BRNS-PG001053
Rhamnaceae			
<i>Ziziphus jujuba</i> Mill.	Terrestrial	Tree	BRNS-PG001198
<i>Ziziphus oenopolia</i> (L.) Mill.	Terrestrial	Shrub	BRNS-PG005269
Rubiaceae			
<i>Catunaregam spinosa</i> (Thunb.) Tirveng.	Terrestrial	Shrub	BRNS-PG001074
<i>Kohautia aspera</i> (Heyne ex Roth) Bremek.	Terrestrial	Herb	BRNS-PG001175
<i>Morinda pubescens</i> Sm.	Terrestrial	Tree	BRNS-PG001096
<i>Oldenlandia herbacea</i> (L.) Roxb.	Terrestrial	Herb	BRNS-PG005154
<i>Pavetta indica</i> L.	Terrestrial	Tree	BRNS-PG005243
<i>Spermacoce neohispida</i> Govaerts	Terrestrial	Herb	BRNS-PG001055
<i>Spermacoce pusilla</i> Wall.	Terrestrial	Herb	BRNS-PG001298
Rutaceae			
<i>Atalantia monophylla</i> DC.	Terrestrial	Shrub	BRNS-PG001228
<i>Chloroxylon swietenia</i> DC	Terrestrial	Tree	BRNS-PG001193
<i>Citrus sinensis</i> Osb.	Terrestrial	Tree	BRNS-PG 005326
<i>Limonia acidissima</i> Groff	Terrestrial	Tree	BRNS-PG005212
<i>Toddalia asiatica</i> (L.) Lam.	Terrestrial	Climbing shrub	BRNS-PG005307
Salvadoraceae			
<i>Azima tetracantha</i> Lam.	Terrestrial	Scrambling shrubs	BRNS-PG005313
<i>Salvadora persica</i> L.	Terrestrial	Tree	BRNS-PG005099
Santalaceae			
<i>Santalum album</i> L.	Terrestrial	Tree	BRNS-PG005300
Sapindaceae			
<i>Sapindus trifoliatus</i> L.	Terrestrial	Tree	BRNS-PG001023
<i>Cardiospermum corindum</i> L.	Terrestrial	Climbing Herb	BRNS-PG001222
<i>Cardiospermum halicacabum</i> L.	Terrestrial	Climbing Herb	BRNS-PG001191
<i>Dodonaea viscosa</i> (L.) Jacq.	Terrestrial	Shrub	BRNS-PG001033
Sapotaceae			
<i>Manilkara hexandra</i> (Roxb.) Dubard,	Terrestrial	Tree	BRNS-PG005161
<i>Manilkara zapota</i> (L.) P.Royen	Terrestrial	Tree	BRNS-PG005276
Scrophulariaceae			
<i>Sopubia delphibifolia</i> (L.)G.Don	Terrestrial	Herb	BRNS-PG001337
<i>Verbascum chinense</i> (L.) Santapau	Terrestrial	Herb	BRNS-PG005121
Simarubaceae			
<i>Ailanthus excelsa</i> Roxb	Terrestrial	Tree	BRNS-PG001343
Solanaceae			
<i>Datura innoxia</i> Mill.	Terrestrial	Shrub	BRNS-PG001012
<i>Datura metel</i> L.	Terrestrial	Herb	BRNS-PG001069
<i>Lycopersicum esculentum</i> Mill.	Terrestrial	Herb	BRNS-PG001052
<i>Physalis angulata</i> L.	Terrestrial	Herb	BRNS-PG005016
<i>Physalis pruinosa</i> L.	Terrestrial	Herb	BRNS-PG001041
<i>Solanum pubescens</i> Willd.	Terrestrial	Shrub	BRNS-PG001181
<i>Solanum surattense</i> Burm. f.	Terrestrial	Herb	BRNS-PG001221
<i>Typha domingensis</i> Pers.	Marshy	Aquatic herb	BRNS-PG005252

Table 2 continued ...

Ulmaceae			
<i>Holoptelea integrifolia</i> Planch.	Terrestrial	Tree	BRNS-PG 005330
Verbenaceae			
<i>Lantana camara</i> L.	Terrestrial	Shrub	BRNS-PG001341
<i>Phyla nodiflora</i> (L.) Greene	Marshy	Herb	BRNS-PG001119
<i>Priva cordifolia</i> (L.f.) Druce	Terrestrial	Herb	BRNS-PG001005
Violaceae			
<i>Hybanthus enneaspermus</i> (L.) Muell.	Terrestrial	Herb	BRNS-PG001084
Vitaceae			
<i>Cissus quadrangularis</i> L.	Terrestrial	Climbing Herb	BRNS-PG001009
<i>Cissus vitiginea</i> L.	Terrestrial	Climbing Herb	BRNS-PG005211
Xanthorrhoeaceae			
<i>Aloe vera</i> (L.) Burm.f.	Terrestrial	Herb	BRNS-PG005315
Zygophyllaceae			
<i>Balanites aegyptiana</i> (L.)	Terrestrial	Small tree	BRNS-PG001073
<i>Tribulus terrestris</i> L.	Terrestrial	Herb	BRNS-PG001231

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