

Flora of NERIST campus, Arunachal Pradesh, India: a checklist along with their common uses

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Abstract

The paper discusses the floristic composition of the NERIST campus, Arunachal Pradesh, India providing a checklist of species and their common uses. A total of 268 species under 194 genera and 93 families including trees (108), herbs (100), shrubs (28), climbers (17) and grasses (12) are recorded in the NERIST campus.

Key words: Floristic diversity, NERIST campus, Arunachal Pradesh.

INTRODUCTION

The North Eastern Regional Institute of Science & Technology (NERIST), a Deemed University is the premier technical Institute of the North Eastern Region under the MHRD (Ministry of Human Resource Development), Govt. of India. The institute was setup by the Government of India, initially as a project of the North Eastern council, in the year 1984. The Institute is situated at Nirjuli in the Papum Pare district near Itanagar, the capital of Arunachal Pradesh at 27°11' N latitude and 93°79' E longitudinal. It covers an area of 515 acres and is located in a picturesque valley at the foot of Eastern Himalaya with the altitudinal variation of 160 – 170 m amsl. It is located in the tropical climatic condition. The natural vegetation of the surrounding area comprises mainly of tropical semi-evergreen forests. The soil condition of the Institute campus is sandy whose P^H ranges from 5.5 – 7.5. Since its inception along with the naturally grown species, a number of locally available and exotic species have been introduced in the campus for its beautification. To make an inventory of the species diversity of the campus, a taxonomic survey has been conducted during 2007 - 2009. And, that has resulted in the compilation of its flora and account on the common uses of those plants.

MATERIALS AND METHODS

A detailed floristic survey of the flora of NERIST campus was conducted during the years 2007 – 2009 and that has covered all wild, naturalized and planted species. The information regarding the usefulness of the recorded plants was collected from different primary or secondary sources (Bhutani 2009; Singh *et al* 2001; Jain 1991). The collected specimens were processed into mounted herbarium sheets following standard herbarium techniques (Jain & Rao 1977) and deposited in the NERIST Herbarium. The identities of specimens were confirmed by the standard taxonomic procedure through taxonomic literature and consulting herbaria of Botanical Survey of India, Arunachal Circle (ARUN), Itanagar and State Forest Research Institute, Itanagr (APFH). The recorded families have been arranged according to Bentham & Hooker's (1862 – 1883) system of plant classification with slight modification. The genera and species under each family are arranged in alphabetical order. It may also be noted that horticultural and floricultural garden plants are kept excluded during the study unless escaped and naturalized.

RESULT AND DISCUSSION

A total number of 268 species under 194 genera and 93 families including herbs, shrubs, climbers, grasses and trees, are found in the campus (Table 1). Out of these, there are 43 species of monocots, 20 species of primitive angiosperms and 7 gymnosperms. In addition, 10 species of fern and fern-allies also have been recorded. The floristic survey revealed that the campus exhibits great diversity of plants, where diversity of tree habit is found maximum with 108 species followed by herbs (100), shrubs (28), climbers (17) and grasses & sedges (15). It is revealed that almost all the tree species in the NERIST campus are useful. So, trees like *Artocarpus chama*, *Dysoxylum binectiferum*, *Gmelina arborea*, *Michelia champaca*, *Morus laevigata*, *Phoebe goalparensis*, *Terminalia arjuna*, etc. are used as timber; some trees like *Elaeocarpus floribundus*, *Mangifera indica*, *Spondias pinnata*, *Moringa oleifera*, *Bauhinia purpurea*, *Ficus elastica*, etc are used as vegetable. Many of these trees produce good firewood. And, majority of the recorded species have medicinal value. A few species like *Agave tequilana*, *Agave deserti*, *Begonia episcopalis*, *Heliconia rostrata*, *Muehlenbeckia platyclada*, *Yucca sp.*, etc. are used as ornamental. Except a few species like *Eucalyptus diversicolor*, *E. globulus* and *E. leucoxyton* most of the species are naturally found in the region. Some exotic species like *Lantana camara*, *Eupatorium odoratum*, *Parthenium hysterophorus*, *Tagetes erecta*, *Psidium guajava*, *Mimusops elengi*, *Spathodea campanulata*, *Grevillea robusta* etc are naturalized in the campus. *Brassica campestris*, *Bixa orellana*, *Camellia sinensis*, *Dillenia indica*, *Magnolia hodgsonii*, *Michelia champaca*, *Pandanus furcatus*, *Sida cordifolia*, *Sida rhombifolia*, *Tetrameles nudiflora*, *Triumfetta rhomboidea*, *Urena lobata* etc. are some of the primitive species occurring in the region. It has been found that most of the species have some uses. About 70% species recorded here have some reported medicinal value where species like *Artemisia nilagirica*, *Emblica officinalis*, *Azadirachta indica*, *Oroxylum indicum*, *Stephania glandulifera*, *Tinospora cordifolia* are high value medicinal plants. A few species namely *Dillenia indica*, *Cicca acida*, *Aegle marmelos*, *Averrhoa carambola*, *Citrus paradisi* etc yield edible fruits while *Solanum torvun*, *S. nigrum*, *S. spirale* *Diplazium esculentum* etc are common vegetable plants. *Pandanus furcatus* a monocotyledonous plants used not only for thatching it is also used as broom. The two cane species, *Calamus rotang* and *C. tenuis* are used as roof and in various handicrafts. The bamboo species are being used in the campus mostly for fence. Thus, the present paper provided a check list of plants growing in the NERIST campus along with their common uses.

Table 1: A checklist of plants growing in the NERIST campus along with their uses

I. Trees:

Name	Family	Common uses
GYMNOSPERMS		
<i>Araucaria columnaris</i> (Forst) Hook.f. [BRNE-110]	Araucariaceae	Ornamental
<i>A. bidwillii</i> Hook.f. [BRNE-087]	Araucariaceae	Ornamental
<i>Agathis robusta</i> F.M. Baily [BRNE-048]	Araucariaceae	Timber as fire wood
<i>Pinus insularis</i> Endlicher [BRNE-079]	Pinaceae	Bark as medicine; timber for house post
<i>Thuja orientalis</i> L. [BRNE-103]	Cupressaceae	Ornamental
<i>Thuja plicata</i> D. Don [BRNE-096]	Cupressaceae	Ornamental
<i>Cryptomeria japonica</i> (L.) D. Don [BRNE-237]	Taxodiaceae	Ornamental
Angiosperms: DICOTYLEDONS		
<i>Dillenia indica</i> L [BRNE-104]	Dilleniaceae	Fruits as veg.; timber for house building
<i>Michelia champaca</i> L. [BRNE-218]	Magnoliaceae	Timber for furniture and construction purposes

Name	Family	Common uses
<i>Magnolia hodgsonii</i> (Hook.f. & Thomson) Keng [BRNE-099]	Magnoliaceae	Timber for furniture
<i>Annona reticulata</i> L. [BRNE-027]	Annonaceae	Fruits edible
<i>Polyalthia longifolia</i> Benth. & Hook.f. [BRNE-201]	Annonaceae	Avenue tree
<i>Bixa orellana</i> L. [BRNE-111]	Bixaceae	Ornamental
<i>Mesua ferrea</i> L. [BRNE-013]	Clusiaceae	Timber for furniture; house building; an avenue tree
<i>Hibiscus tiliaceus</i> L. [BRNE-002]	Malvaceae	Bark as rope
<i>Kydia glabrescens</i> Masters [BRNE-010]	Malvaceae	Timber as construction material
<i>Elaeocarpus floribundus</i> Blume [BRNE-234]	Elaeocarpaceae	Leaves and fruits as vegetable
<i>E. sphaericus</i> (Gaertner) K. Schumann [BRNE-203]	Elaeocarpaceae	Timber as fire wood; beads religious
<i>Aegle marmelos</i> (L.) Correa [BRNE-205]	Rutaceae	Fruits as cool drink; medicinal
<i>Citrus paradisi</i> Macfadyen [BRNE-017]	Rutaceae	Fruits edible
<i>Murraya koenigii</i> Sprengel [BRNE-014]	Rutaceae	Leaves used in cooking for aroma
<i>Canarium bengalense</i> Roxburgh. [BRNE-198]	Burseraceae	Timber as furniture and house post
<i>Azadirachta indica</i> Jussieu [BRNE-028]	Meliaceae	Leaves and bark as medicine
<i>Dysoxylum gobara</i> (Buch.-Ham.) Merr. [BRNE-011]	Meliaceae	Timber in construction purposes
<i>Melia azedarach</i> L. [BRNE-021]	Meliaceae	Leaves as insecticide
<i>Zizyphus mauritiana</i> Lamarck [BRNE-038]	Rhamnaceae	Timber as agricultural tools, fire wood
<i>Anacardium occidentale</i> L. [BRNE-001]	Anacardiaceae	Fruits edible; bark medicinal
<i>Mangifera indica</i> L. [BRNE-229]	Anacardiaceae	Young fruits as vegetable; ripe fruits edible; bark as medicine
<i>Spondias pinnata</i> (L.f.) Kurz [BRNE-207]	Anacardiaceae	Fruits & leaves as vegetable; bark as medicine
<i>Moringa oleifera</i> Lamarck [BRNE-047]	Moringaceae	Leaves and fruits as vegetable
<i>Acacia auriculiformis</i> A. Cunningham ex Bentham [BRNE-064]	Mimosaceae	As road side tree; timber as fire wood
<i>Acacia farnesiana</i> (L.) Willdenow [BRNE-060]	Mimosaceae	As road side tree; timber as fire wood
<i>Albizia procera</i> (Roxburgh) Bentham [BRNE-216]	Mimosaceae	Timber for house building
<i>Albizia julibrissin</i> Durazzini. [BRNE-065]	Mimosaceae	Timber for furniture
<i>Albizia lucida</i> Bentham [BRNE-074]	Mimosaceae	Timber for house building and furniture
<i>Calliandra umbrosa</i> Bentham [BRNE-208]	Mimosaceae	Avenue tree
<i>C. griffithii</i> Bentham [BRNE-106]	Mimosaceae	Ornamental
<i>Samanea saman</i> (Jacquin) Merrill [BRNE-253]	Mimosaceae	As shade tree; timber for furniture
<i>Bauhinia purpurea</i> L. [BRNE-224]	Caesalpiniaceae	Leaves as fodder and vegetable; ornamental
<i>B. variegata</i> L. [BRNE-085]	Caesalpiniaceae	Leaves as fodder and vegetable; ornamental
<i>Delonix regia</i> Rafinesque [BRNE-026]	Caesalpiniaceae	As shade tree; ornamental; timber as fire wood
<i>Cassia fistula</i> L. [BRNE-006]	Caesalpiniaceae	Leaves as vegetable
<i>Caesalpinia pulcherrima</i> (L.) Swartz [BRNE-210]	Caesalpiniaceae	Ornamental
<i>Saraca asoca</i> (Roxburgh) de Willde [BRNE-029]	Caesalpiniaceae	Ornamental
<i>Dalbergia sissoo</i> Roxburgh [BRNE-019]	Fabaceae	Timber for house construction
<i>Erythrina stricta</i> Roxburgh [BRNE-003]	Fabaceae	Timber as fire wood; planted in fences
<i>Pongamia pinnata</i> L. [BRNE-222]	Fabaceae	Bark is used for treatment of dysentery.
<i>Altingia excelsa</i> Noronha [BRNE-101]	Hamamelidaceae	Timber as furniture; house building
<i>Terminalia arjuna</i> Wight & Arnott [BRNE-260]	Combretaceae	Timber as furniture; house building; bark as medicine

Name	Family	Common uses
<i>Terminalia bellirica</i> (Gaertner) Roxburgh [BRNE-254]	Combretaceae	Timber as furniture; fruits and barks as medicine
<i>Terminalia chebula</i> Retzius [BRNE-109]	Combretaceae	Timber as house post; fruits medicinal
<i>Callistemon citrinus</i> (Curt.) Skeels [BRNE-256]	Myrtaceae	Avenue tree
<i>Eucalyptus linearis</i> Dehnnhardt [BRNE-107]	Myrtaceae	Timber as furniture and fire wood
<i>E. globulus</i> Labillardière [BRNE-252]	Myrtaceae	Timber as furniture; house of building
<i>Psidium gaujava</i> L. [BRNE-258]	Myrtaceae	Fruits edible; leaves used against gastric, diarrhea
<i>Syzygium cumini</i> (L) Skeels [BRNE-255]	Myrtaceae	Fruits edible; bark used against gastric; timber for agricultural tools
<i>Duabanga grandiflora</i> (Roxburgh) Walpers [BRNE-247]	Lythraceae	Timber for furniture, house building
<i>Lagerstroemia speciosa</i> Persoon [BRNE-112]	Lythraceae	Timber for making boats
<i>Carica papaya</i> L. [BRNE-119]	Caricaceae	Fruits as vegetable
<i>Tetrameles nudiflora</i> R.Br. [BRNE-231]	Datisceaceae	Timber as fire wood
<i>Trevesia palmata</i> de Vis [BRNE-241]	Araliaceae	Bark as medicine
<i>Neolamarckia cadamba</i> (Roxburgh) Bosser [BRNE-244]	Rubiaceae	Timber for furniture
<i>Mimusops elengi</i> L. [BRNE-267]	Sapotaceae	Fruits edible; ornamental
<i>Alstonia scholaris</i> R. Br. [BRNE-235]	Apocynaceae	Timber for furniture; bark and latex medicinal
<i>Thevetia nerifolia</i> Jussieu [BRNE-125]	Apocynaceae	Ornamental; milky latex erupt boils
<i>Ehretia acuminata</i> R. Br. [BRNE-117]	Boraginaceae	Bark in chewing.
<i>Jacaranda acutifolia</i> Humboldt & Bonpland [BRNE-227]	Bignoniaceae	Avenue tree; timber as fire wood
<i>Oroxylum indicum</i> (L.) Ventenat [BRNE-124]	Bignoniaceae	Bark as medicine
<i>Spathodea campanulata</i> P. Beauvois [BRNE-120]	Bignoniaceae	Timber for furniture; house building
<i>Tecoma stans</i> (L.) Jussieu ex Kunth [BRNE-134]	Bignoniaceae	Avenue tree
<i>Callicarpa arborea</i> Roxburgh [BRNE-136]	Verbenaceae	Bark medicinal; timber for furniture
<i>Gmelina arborea</i> L. [BRNE-144]	Verbenaceae	Leaves as vegetable; timber for furniture, house building
<i>Nyctanthes arbor-tristis</i> L. [BRNE-149]	Nyctaginaceae	Flower as vegetable; bark medicinal
<i>Cinnamomum bejolghata</i> (Buch.-Ham) Sweet [BRNE-140]	Lauraceae	Timber for furniture; bark as spices
<i>C. camphora</i> (L.) Nees & Ebermaier [BRNE-152]	Lauraceae	Bark as insecticide
<i>C. glaucescens</i> (Nees) Hand.-Mazz. [BRNE-154]	Lauraceae	Timber for construction of house
<i>C. tamala</i> Nees ex Ebermaier [BRNE-157]	Lauraceae	Leaves as spices; timber as house post
<i>C. zeylanicum</i> Blume [BRNE-133]	Lauraceae	Bark as spice
<i>Litsea monopetala</i> (Roxburgh) Persoon [BRNE-158]	Lauraceae	Timber as fire wood; bark cures gastric, diarrhea etc.
<i>Phoebe goalparensis</i> Hutchinson [BRNE-163]	Lauraceae	Timber for furniture and construction
<i>Grevillea robusta</i> A. Cunningham ex R. Br. [BRNE-168]	Proteaceae	Avenue tree; house post
<i>Aquilaria malaccensis</i> Lamarck [BRNE-147]	Thymelaeaceae	Timber as agricultural tools
<i>Cicca acida</i> (L.) Merrill [BRNE-174]	Euphorbiaceae	Sour fruits edible
<i>Codiaeum variegatum</i> Blume [BRNE-166]	Euphorbiaceae	Ornamental
<i>Emblica officinalis</i> Gaertner [BRNE-156]	Euphorbiaceae	Fruits and bark medicinal
<i>Macaranga denticulata</i> Muell.-Arg. [BRNE-171]	Euphorbiaceae	Timber as fire wood
<i>M. peltata</i> (Roxburgh) Muell.-Arg. [BRNE-092]	Euphorbiaceae	Fire wood
<i>Mallotus albus</i> Muell.-Arg. [BRNE-220]	Euphorbiaceae	Timber as fire wood; leave as dinner plates

Name	Family	Common uses
<i>Artocarpus chama</i> Buchanon-Hamilton [BRNE-172]	Moraceae	Fruits edible; timber for construction
<i>Artocarpus heterophylla</i> Lamarck [BRNE-164]	Moraceae	Fruits edible; timber for furniture, agricultural tools
<i>Ficus bengalensis</i> L. [BRNE-187]	Moraceae	In religious purposes
<i>Ficus elastica</i> Roxburgh [BRNE-240]	Moraceae	Young shoot as vegetable
<i>Ficus hispida</i> L. [BRNE-243]	Moraceae	Leaves as vegetable
<i>Ficus religiosa</i> L. [BRNE-197]	Moraceae	As shade tree, religious
<i>Ficus rumphii</i> . Blume [BRNE-190]	Moraceae	Young leaves as vegetable; timber as fire wood
<i>Morus alba</i> L. [BRNE-206]	Moraceae	Leaves to rear silk worm; young leave as vegetable
<i>Morus laevigata</i> Wallich [BRNE-185]	Moraceae	Fruits edible; timber for furniture, house building
<i>Sarcochlamys pulcherrima</i> Gaudichaud [BRNE-246]	Urticaceae	Leaves as vegetable
<i>Casuarina equisetifolia</i> J. R. & G. Forster [BRNE-249]	Casuarinaceae	Timber as fire wood
<i>Castanopsis</i> sp [BRNE-214]	Fagaceae	Timber as furniture
<i>Quercus</i> sp. [BRNE-251]	Fagaceae	Timber for furniture, house building
<i>Alnus nepalensis</i> D. Don [BRNE-263]	Betulaceae	Timber for furniture, house post
Angiosperms: MONOCOTYLEDONS		
<i>Arenga pinnata</i> Merrill [BRNE-266]	Arecaceae	Leaves as brooms
<i>Caryota obtusa</i> Griffith [BRNE-97]	Arecaceae	As avenue tree
<i>Livistona jenkinsiana</i> Griffith [BRNE-262]	Arecaceae	Fruits edible; leave as thatch
<i>Phoenix sylvestris</i> Roxburgh [BRNE-094]	Arecaceae	Fruits edible
<i>Roystonea regia</i> (Kunth) O. F. Cook [BRNE-007]	Arecaceae	Avenue tree; construction
<i>Pandanus furcatus</i> Roxburgh [BRNE-030]	Pandanaceae	Leaves as thatches and brooms
<i>Cordyline australis</i> Hook. f. [BRNE-009]	Asteliaceae / Liliaceae	Ornamental

II. Grasses and sedges:**Angiosperms: MONOCOTYLEDONS**

<i>Chrysopogon aciculatus</i> (Retzius) Trinius [BRNE-022]	Poaceae	Fodder
<i>Arundo donax</i> L. [BRNE-242]	Poaceae	Making huts
<i>Bambusa balcooa</i> Roxburgh [BRNE-020]	Poaceae	Construction & fencing
<i>Bambusa tulda</i> Roxburgh [BRNE-230]	Poaceae	Construction & fencing
<i>Bambusa nana</i> Roxburgh [BRNE-015]	Poaceae	Fencing
<i>Cymbopogon flexuosus</i> (Nees ex Steudel) W. Watson [BRNE-008]	Poaceae	Fodder
<i>Cynodon dactylon</i> (L.) Persoon [BRNE-223]	Poaceae	Fodder
<i>Dactyloctenium aegyptium</i> (L.) P. Beauverd [BRNE-024]	Poaceae	Whole plant for bone fracture of cocks
<i>Eragrostiella bifaria</i> (Vahl) Bor [BRNE-004]	Poaceae	Fodder
<i>Imperata cylindrica</i> (L.) W. Rausch [BRNE-040]	Poaceae	Fodder, rope
<i>Saccharum officinarum</i> L. [BRNE-018]	Poaceae	Stem extract for jaundice
<i>Setaria glauca</i> (L.) P. Beauvois [BRNE-250]	Poaceae	Fodder
<i>Cyperus esculentus</i> L. [BRNE-039]	Cyperaceae	Fodder; bone fracture in chickens
<i>C. rotundus</i> L. [BRNE-034]	Cyperaceae	Fodder
<i>C. brevifolius</i> (Rottburgh) Hasskarl [BRNE-29]	Cyperaceae	Fodder

Name	Family	Common uses
III. Climbers:		
Angiosperms: DICOTYLEDONS		
<i>Stephania glandulifera</i> Miers [BRNE-046]	Menispermaceae	Tuber as medicinal
<i>Tinospora cordifolia</i> (Willdenow) Hook.f. & Thomson [BRNE-033]	Menispermaceae	Stem use in bone fracture & as medicine
<i>Clitoria ternatea</i> L. [BRNE-257]	Fabaceae	Ornamental and leaf as medicinal
<i>Rosa. multiflora</i> Thunberg [BRNE-245]	Rosaceae	Ornamental and planting as fence
<i>Paederia foetida</i> L. [BRNE-062]	Rubiaceae	Leaves as vegetable, medicine
<i>Mikania micrantha</i> H. B. & K. [BRNE-051]	Asteraceae	Leaf as vegetable & medicine
<i>Bougainvillea spectabilis</i> Willdenow [BRNE-059]	Nyctaginaceae	Ornamental
<i>Piper sylvaticum</i> Roxburgh [BRNE-032]	Piperaceae	Fruits as medicine
<i>Piper beteloides</i> C. DC. [BRNE-209]	Piperaceae	Leaf as medicine & chewing with beetle nut as mastigatory
<i>Piper attenuatum</i> Buch.-Ham. ex Wallich [BRNE-202]	Piperaceae	Medicinal
<i>Ficus ramentaceae</i> Roxburgh [BRNE-191]	Moraceae	Not known
<i>Ficus laevis</i> Blume [BRNE-261]	Moraceae	Not known
Angiosperms: MONOCOTYLEDONS		
<i>Dioscorea bulbifera</i> L. [BRNE-217]	Dioscoreaceae	Rootstock as vegetable, medicinal
<i>Pothos scandens</i> L. [BRNE-177]	Araceae	Climbing shoot to treat bone fracture
<i>Philodendron fragrantissimum</i> (Hooker) Kunth [BRNE-061]	Araceae	Ornamental
<i>Calamus rotang</i> L. [BRNE-194]	Arecaceae	Making huts & various handicrafts
<i>C. tenuis</i> Roxburgh [BRNE-181]	Arecaceae	Making huts & various handicrafts
IV. Shrubs:		
<i>Camellia sinensis</i> O. Kuntze [BRNE-053]	Theaceae	Leaves & bark for wound healing, gastric, dysentery
<i>Eurya acuminata</i> DC. [BRNE-031]	Theaceae	Fruits for Indigestion, gastric
<i>Gossypium herbaceum</i> L. [BRNE-225]	Malvaceae	Bark extract for hair washing
<i>Hibiscus rosa-sinensis</i> L. [BRNE-058]	Malvaceae	Flowers & young leaves as antidandruff wash
<i>Sida cordifolia</i> L. [BRNE-025]	Malvaceae	Bark for skin diseases
<i>S. rhombifolia</i> L. [BRNE-042]	Malvaceae	Bark for skin diseases, cancer
<i>Triumfetta rhomboidea</i> Jacquin [BRNE-068]	Malvaceae	Leaf for wound healing
<i>Urena lobata</i> L. BRNE35	Malvaceae	Bark for cough, bone fracture
<i>Ambroma augusta</i> (L.) L. f. [BRNE-050]	Sterculiaceae	Leaf for boil eruption
<i>Citrus limon</i> (L.) Burmann f. [BRNE-052]	Rutaceae	Fruits & leaves for dysentery, gastric; antidandruff
<i>Cassia alata</i> L. [BRNE-016]	Fabaceae	Leaf for skin diseases, wound healing
<i>Crotalaria striata</i> DC. [BRNE-067]	Fabaceae	Flowers for skin diseases
<i>Melastoma malabathricum</i> L. [BRNE-045]	Melastomataceae	Stem for toothache, gastric
<i>Osbeckia glauca</i> Wallich ex Naudin [BRNE-066]	Melastomataceae	Stem extract for diarrhea
<i>Rosa damascenes</i> Miller [BRNE-012]	Rosaceae	Ornamental, fencing
<i>Ixora acuminata</i> Roxburgh [BRNE-023]	Rubiaceae	Flower for antidandruff
<i>Calotropis gigantea</i> (L.) Dryand [BRNE-055]	Asclepiadaceae	Milky latex for boil eruption; leaves for body swelling
<i>Allamanda cathartica</i> L. [BRNE-005]	Apocynaceae	Ornamental; flowers antidandruff
<i>Ervatamia coronaria</i> Stapf [BRNE-077]	Apocynaceae	Ornamental; bark for gastric, dysentery
<i>Solanum indicum</i> L. [BRNE-081]	Solanaceae	Fruits as vegetable; against indigestion
<i>S. spirale</i> Roxburgh [BRNE-070]	Solanaceae	Fruits as vegetable
<i>S. torvum</i> Sw. [BRNE-049]	Solanaceae	Fruits as vegetable
<i>Justicia adhatoda</i> L. [BRNE-069]	Acanthaceae	Stem & flower extract treats cough, gastric, diarrhea.

Name	Family	Common uses
<i>Clerodendrum colebrookianum</i> Walper [BRNE-057]	Verbenaceae	Leaves as vegetable; indigestion, blood pressure
<i>C. indicum</i> L. [BRNE-063]	Verbenaceae	Ornamental; leaves for indigestion
<i>Coedium variagatum</i> Blume [BRNE-075]	Euphorbiaceae	Bark for Gastric
<i>Jathropa curcas</i> L. [BRNE-078]	Euphorbiaceae	Latex boil eruption
<i>Ricinus communis</i> L. [BRNE-088]	Euphorbiaceae	Leaf for headache

V. Herbs:

PTERIDOPHYTES

<i>Lycopodium aberdaricum</i> Chiovenda [BRNE-076]	Lycopodiaceae	Not known
<i>Lycopodium alpinum</i> L. [BRNE-084]	Lycopodiaceae	Not known
<i>Selaginella lepidophylla</i> Hook.f. & Greville [BRNE-098]	Selaginellaceae	Not known
<i>Equisetum hyemale</i> L. [BRNE-116]	Equisetaceae	Ornamental
<i>Pteris vittata</i> L. [BRNE-105]	Pteridaceae	Young fronds as vegetable
<i>Pteris albersii</i> Hieron [BRNE-126]	Pteridaceae	Not known
<i>Cyathea gigantea</i> (Wallich ex Hook.f.) Holtum [BRNE-127]	Cyatheaceae	Medicinal
<i>Christella parasitica</i> (L.) Lér. [BRNE-100]	Thelypteridaceae	Young fronds as vegetable
<i>Diplazium esculentum</i> Retzius [BRNE-090]	Athyriaceae	Young fronds as vegetable
<i>Diplazium australe</i> (R.Br.) Wakef. [BRNE-080]	Athyriaceae	Young fronds as vegetable

Angiosperms: DICOTYLEDONS

<i>Drymaria cordata</i> Willdenow [BRNE-122]	Caryophyllaceae	Leaf for tonsillitis.
<i>Portulaca oleracea</i> L. [BRNE-089]	Portulacaceae	Twigs as vegetable
<i>Meconopsis betonicifolia</i> L. [BRNE-082]	Papaveraceae	Ornamental
<i>Argemone mexicana</i> L. [BRNE-086]	Papaveraceae	Leaf as spice; against gastric
<i>Brassica campestris</i> L. [BRNE-108]	Brassicaceae	Twigs as vegetable
<i>Brassica juncea</i> Czernjaev [BRNE-109]	Brassicaceae	Twigs as vegetable; against indigestion
<i>Cleome gynandra</i> L. [BRNE-113]	Capparaceae	Young fronds as vegetable
<i>Cleome viscosa</i> L. [BRNE-121]	Capparaceae	Young fronds as vegetable
<i>Oxalis corniculata</i> L. [BRNE-132]	Oxalidaceae	Leaves as vegetable; diarrhea, dysentery
<i>Oxalis debilis</i> H.B.K. [BRNE-095]	Oxalidaceae	Whole plant for diarrhea, dysentery
<i>Mimosa pudica</i> L. [BRNE-129]	Mimosaceae	Root against hookworm, tonsillitis.
<i>Duchesnia indica</i> Focke [BRNE-128]	Rosaceae	Fruits edible
<i>Kalanchoe pinnata</i> Persoon [BRNE-102]	Crassulaceae	Leaf for cough, diarrhea
<i>Cuphea balsamona</i> Chamisso & Schlecht [BRNE-142]	Lythraceae	Whole plant for allergies
<i>Ludwigia prostrata</i> Roxburgh [BRNE-138]	Onagraceae	Leaf and stem for leprosy, cough, allergies
<i>Begonia episcopalis</i> C.B. Clarke [BRNE-146]	Begoniaceae	Ornamental
<i>Opuntia elatior</i> Miller [BRNE-139]	Cactaceae	Ornamental and phylloclade against headache
<i>Centella asiatica</i> (L.) Urban [BRNE-143]	Apiaceae	Leaves as vegetable; tonic, cough, dysentery, diarrhea
<i>Eryngium foetidum</i> L. [BRNE-178]	Apiaceae	Leaf as spice; vegetable
<i>Borreria hispida</i> K. Schumann [BRNE-159]	Rubiaceae	Leaf for gastric troubles
<i>Borreria ocyroides</i> DC. [BRNE-165]	Rubiaceae	Whole plant for headache
<i>Mussaenda</i> sp. [BRNE-196]	Rubiaceae	Stem as toothache
<i>Ageratum conyzoides</i> L. [BRNE-167]	Asteraceae	Leaf for blood coagulation
<i>Artemisia nilagirica</i> L. [BRNE-213]	Asteraceae	Leaf extracted for cough, hookworm
<i>Bidens biternata</i> Merrill & Sherff [BRNE-169]	Asteraceae	Twigs as vegetable; dysentery
<i>Calendula officinalis</i> L. [BRNE-115]	Asteraceae	Leaf for blood clotting
<i>Eclipta prostrata</i> Hasskarl [BRNE-170]	Asteraceae	Whole plant for cough, diarrhea, dysentery

Name	Family	Common uses
<i>Eupatorium odoratum</i> L. [BRNE-179]	Asteraceae	Leaf for blood coagulation
<i>Gynura crepidioides</i> Bentham [BRNE-153]	Asteraceae	As vegetable; against diarrhea
<i>Galinsoga parviflora</i> Cavanilles [BRNE-160]	Asteraceae	Leaf for indigestion of food
<i>Parthenium hysterophorus</i> L. [BRNE-192]	Asteraceae	Leaf for healing wounds
<i>Spilanthes acmella</i> L. [BRNE-195]	Asteraceae	Twigs as vegetable; indigestion
<i>S. paniculata</i> Wallich ex DC. [BRNE-161]	Asteraceae	Twigs as vegetable; indigestion, diarrhea, dysentery
<i>Sonchus arvensis</i> L. [BRNE-175]	Asteraceae	Leaf as vegetable
<i>Tagetes erecta</i> L. [BRNE-093]	Asteraceae	Leaf for blood coagulation; ornamental
<i>Vernonia cinerea</i> L. [BRNE-182]	Asteraceae	Leaf as vegetable
<i>Xanthium strumarium</i> L. [BRNE-137]	Asteraceae	Leaf for blood coagulation
<i>Ipomoea aquatica</i> Forskal [BRNE-073]	Convolvulaceae	Twigs as vegetable
<i>Cuscuta reflexa</i> Roxburgh [BRNE-199]	Cuscutaceae	Treating swelling of body parts
<i>Pratia nummularia</i> (Lamarck) A. Br. et Asch. [BRNE-054]	Campanulaceae	Leaf as vegetable
<i>Jasminum auriculatum</i> Vahl [BRNE-204]	Oleaceae	Ornamental.
<i>Catharanthus roseus</i> (L.) G. Don [BRNE-056]	Apocynaceae	Leaf extracted in child birth
<i>Rauwolfia serpentina</i> Bentham [BRNE-188]	Apocynaceae	Root as antimalarial, against cough
<i>Heliotropium indicum</i> L. [BRNE-232]	Boraginaceae	Leaf for blood clotting
<i>Capsicum annuum</i> L. [BRNE-248]	Solanaceae	Fruits as vegetable; diarrhea
<i>Lycopersicon esculentum</i> Miller [BRNE-219]	Solanaceae	Leaf as vegetable
<i>Physalis minima</i> L. [BRNE-238]	Solanaceae	Leaf as vegetable; indigestion
<i>Solanum viarum</i> Dunal [BRNE-226]	Solanaceae	Stem as toothache
<i>Solanum nigrum</i> L. [BRNE-264]	Solanaceae	Fruits as vegetable; indigestion
<i>Scoparia dulcis</i> L. [BRNE-228]	Scrophulariaceae	Stem extracted for cancer, diarrhea
<i>Phlogacanthus thyrsoiflorus</i> Nees [BRNE-212]	Acanthaceae	Stem extracted for cough, tonsillitis, dysentery, diarrhea
<i>Leucas aspera</i> (Willdenow) Link [BRNE-211]	Lamiaceae	Leaf as vegetable; tonsillitis, dysentery
<i>Mentha arvensis</i> L. [BRNE-221]	Lamiaceae	Leaf as vegetable & spice
<i>Ocimum sanctum</i> L. [BRNE-184]	Lamiaceae	Leaf for cough, dysentery, diarrhea
<i>Salvia officinalis</i> L. [BRNE-215]	Lamiaceae	Leaf for healing wound, allergies
<i>Mirabilis jalapa</i> L. [BRNE-072]	Nyctaginaceae	Ornamental and leaf for blood clotting
<i>Achyranthes aspera</i> L. [BRNE-091]	Amaranthaceae	Twigs as vegetable; healing wound
<i>Aerva sanguinolenta</i> (L.) Blume [BRNE-215]	Amaranthaceae	Ornamental; twigs as vegetable
<i>Alternanthera sessilis</i> L. BRNE233	Amaranthaceae	Leaf for wound healing, skin diseases
<i>Amaranthus spinosus</i> L. [BRNE-071]	Amaranthaceae	Young seedling as vegetable
<i>A. viridis</i> L. [BRNE-0114]	Amaranthaceae	Young seedling as vegetable
<i>Celosia argentea</i> (L.) O. Kuntze [BRNE-135]	Amaranthaceae	Young seedling as vegetable.
<i>C. cristata</i> L. [BRNE-268]	Amaranthaceae	Ornamental in gardens
<i>Torenia asiatica</i> L. [BRNE-118]	Scrophulariaceae	Whole plant for cough; hair washing
<i>Chenopodium album</i> L. [BRNE-259]	Chenopodiaceae	Leaf or whole plant as vegetable; indigestion
<i>C. ambrosioides</i> L. [BRNE-200]	Chenopodiaceae	Leaf as vegetable & spice
<i>Fagopyrum esculentum</i> Moench [BRNE-044]	Polygonaceae	Leaf for blood coagulation.
<i>Muehlenbeckia platyclada</i> Meisner [BRNE-043]	Polygonaceae	As ornamental.
<i>Persicaria chinensis</i> (L.) H. Gross [BRNE-239]	Polygonaceae	Leaf and bark for skin diseases
<i>Persicaria hydropiper</i> (L.) Spach [BRNE-265]	Polygonaceae	Leaf for skin diseases
<i>Houttuynia cordata</i> Thunberg [BRNE-123]	Saururaceae	Leaf or whole plant as vegetable & specie; diarrhea, dysentery
<i>Euphorbia hirta</i> L. [BRNE-041]	Euphorbiaceae	Latex of the bark for boil eruption
<i>Pedilanthus tithymaloides</i> Poiteau [BRNE-130]	Euphorbiaceae	Latex for boil eruption, piles, skin diseases
<i>Phyllanthus fraternus</i> G.L. Webster [BRNE-141]	Euphorbiaceae	Whole plant for gastric troubles, cough
<i>Cannabis sativa</i> L. [BRNE-173]	Cannabaceae	Bark as fiber

Name	Family	Common uses
Angiosperms: MONOCOTYLEDONS		
<i>Ananas comosus</i> Merrill [BRNE-176]	Bromeliaceae	Fruits edible; against piles
<i>Alpinia galanga</i> (L.) Willdenow [BRNE-186]	Zingiberaceae	Leaves as dinner plate; young plants as vegetable & rope
<i>Costus speciosus</i> (Koenig) J. E. Smith [BRNE-037]	Costaceae	Stem as Toothache and extracted of the stem for jaundice, tonic
<i>Musa paradisiaca</i> L. [BRNE-162]	Musaceae	Fruits and young seedling for diarrhea, dysentery
<i>Musa nana</i> Loureiro [BRNE-150]	Musaceae	Dry cover of the banana fruits for Piles
<i>Heliconia rostrata</i> Ruiz & Pavon [BRNE-183]	Heliconiaceae	Ornamental
<i>Agave deserti</i> Engelm. [BRNE-193]	Agavaceae	Ornamental.
<i>Agave tequilana</i> Web. [BRNE-151]	Agavaceae	Ornamental.
<i>Sansevieria roxburghiana</i> Schultes f. [BRNE-036]	Agavaceae	Juice of the leaf for boil eruption; ornamental
<i>Yucca gloriosa</i> L. [BRNE-148]	Agavaceae	As ornamental
<i>Acorus calamus</i> L. [BRNE-155]	Acoraceae	Whole plant for abdomen pain, headache, hookworm
<i>Commelina benghalensis</i> L. [BRNE-131]	Commelinaceae	Ornamental; whole plant for wound healing
<i>Alocasia odora</i> (Roxburgh) K. Koch [BRNE-180]	Araceae	Rhizome and leaf as vegetable
<i>Arapaima triphyllum</i> (L.) Torrey [BRNE-189]	Araceae	Leaf as vegetable; ornamental
<i>Colocasia esculenta</i> (L.) Schott [BRNE-145]	Araceae	Leaf as vegetable

CONCLUSION

It may be stated that the Institute campus harbors rich species diversity with various scientifically, culturally and economically important species. Apart from beautification of the campus, these species are supportive to the human population of the campus and other fauna like birds, insects, microbes etc in various ways and play vital ecological role. As the world is facing unprecedented loss of biological diversity, conservation of plant diversity in any locality assumes great importance. In this regard the NERIST campus may play a significant role in the conservation of biodiversity

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