

SF Plant Science and Seed Research

Genetic Diversity of Plant Species in Hilly Areas Adjacent to Sylhet Agricultural University

Rahman SK1, Ahmed T2, Alauddin M3, Haque MK4 and Uddin M5*

¹Department of Genetics and Plant Breeding, Sylhet Agricultural University, Bangladesh

²Department of Plant Pathology and Seed Science, Sylhet Agricultural University, Bangladesh

³Department of Horticulture, Sylhet Agricultural University, Bangladesh

⁴Department of Crop Science and Technology, University of Rajshahi, Bangladesh

⁵School of Environmental Science and Engineering, Tianjin University, China

Abstract

The study was carried out to investigate the status of genetic diversity of plant species in hilly areas and plain lands of Sylhet Agricultural University (SAU) and in hilly areas adjacent to SAU during January, 2015 to June, 2015. Four study areas were selected to investigate the status of genetic diversity of plant species. It also explored relationships between the characteristics, types, habits, total number of plants and the relationships between hilly area plants and plain land area plants. Many plant species including trees, shrubs and herbs were recorded from the studied hilly areas. Several medicinal plants found in hilly areas were also recorded. Among these plant species the most prevalent tree species were horitoki, bohera, mehgoni, arjun, neem etc, and the most prevalent herb species were chanci, shaknotey, katanotey, malancha shak, salvia etc. The highest numbers of natural tree species were found in hilly areas of M.C. College adjacent to SAU whereas the lowest numbers of tree species were found in the area of Vice-chancellor's bungalow of SAU. The highest number of shrubs and herbs were found in Vice-chancellor's bungalow and plain land of SAU, respectively. Both naturally grown and planted trees, shrubs and herbs along with a good number of medicinal plants were found in the studied areas which exhibited the wide diversity in plant genetic resources in studied areas.

Keywords: Genetic diversity; Medicinal plants; Genetic resources; Hilly areas; Trees

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*Correspondence:

E-mail: uddin@tju.edu.cn

Minhaz Uddin, School of Environmental Science and Engineering, Tianjin University, China.

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Introduction

Genetic diversity is of fundamental importance in the continuity of a species as it provides the necessary adaptation to the prevailing biotic and abiotic environmental conditions, and enables change in the genetic composition to cope with changes in the environment. Bangladesh is known as an evergreen country with the huge number of plant genetic resources. The majority of the country's land was formed by river alluvium from the Ganges and the Brahmaputra and their tributaries, which consists mostly of flood plains (80%) with some hilly areas (12%). Although a small country, Bangladesh is exceptionally endowed with a vast variety of flora and fauna due to its unique geophysical location [1,2]. An estimated 5,700 species of angiosperms alone, including 68 woody legumes, 130 fiber yielding plants, 500 medicinal plants, 29 orchids, 3 species of gymnosperms and 1,700 pteridophytes has been recorded from the country [3]. Bangladesh National Herbarium reported 106 vascular plant species under risk of various degrees of extinction in the country [4].

Sylhet is the northeastern divisional city of Bangladesh. The Greater Sylhet has only one agricultural university named Sylhet Agricultural University which is located in near Tilaghor reserve forest.

However, the drawback is the lack of proper documentation of the several components of the natural history on the campus. There have been innumerable newspaper reports on the occurrence of several tree plants, herbs, shrubs, medicinal plants and ornamental plants species, the findings have never been a part of any scientific research report. To understand the significance of the existing biodiversity of plant species, it is necessary to understand what is valued of the place and what the benefits it provides are and its relevance for the future. Biodiversity does influence the rates or nature of ecosystem processes, and a majority of studies have found that a reduction in biodiversity does have a negative effect on ecosystem function. Biodiversity provides a useful measure of the

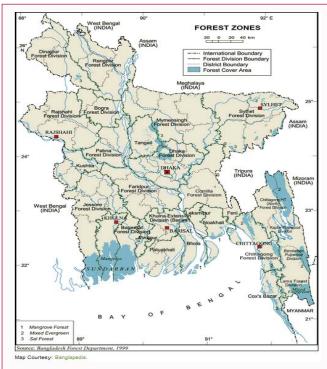


Figure 1: Map showing the distribution of forest cover areas (hilly areas) of Bangladesh [5].

quality of the environment and of the probability of sustainability on which man depends (Figure 1) [5].

Geographically, Bangladesh falls near the Indo-Burma region which is one of the ten global prime spot areas and supposed to have 7000 endemic plant species [6]. Due to its unique geo-physical location Bangladesh is exceptionally characterized by a rich biological diversity [1,2,7,8]. An estimated 5,700 species of angiosperms alone, including 68 woody legumes, 130 fibre yielding plants, 500 medicinal plants, 29 orchids, three species of gymnosperms and 1700 pteridophytes have been recorded from Bangladesh (Figure 2) [9-11].

Materials and Methods

The study "Genetic diversity of plant species in hilly areas adjacent to Sylhet Agricultural University" has been undertaken by several field visits during (January 2015 to June 2015) by several. The study involved seasonal documentation of the flora for its abundance and distribution. To minimize errors, several repeated visits were made to collect the data properly. The steps followed in the present study were the selection of the area, specific records of the relevant factors, sampling technique, period of investigation, preparation of the interview schedule, rapport building with respondents, collection of data, processing and analysis of data.

Study area

The study was conducted in following areas of SAU and adjacent to Sylhet Agricultural University campus- Vice-chancellor's bungalow of SAU, Dairy Farm Area adjacent to SAU, M.C. College Area and Plain land of SAU.

Soil and climatic condition of selected study sites

The soil of the study site was grey, sandy loam in texture and belongs to the "non-calcareous Grey" soils under Eastern Surma-Kusiyara Flood Plain [12,13]. Soil ranges from clay loams to pale

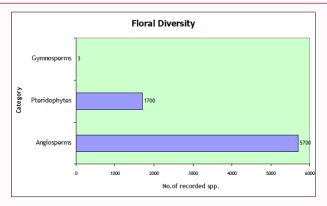


Figure 2: Floral diversity of Bangladesh.

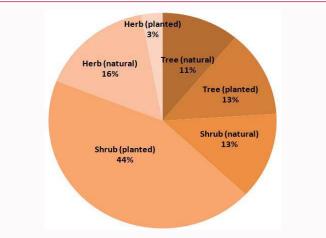
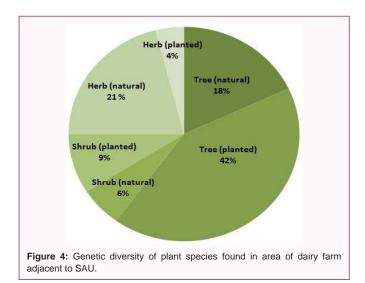


Figure 3: Genetic diversity of plant species found in area of Vice-chancellor's bungalow.

brown (acidic) clay loams on the hills. Red sandy clay contains granules of magniferous iron ore [14]. Soil pH ranges from 5 to 7.5. The tropical monsoon climate prevails in the area with average maximum temperature of 31.6°C and average minimum temperature of 19.9°C. The average annual rainfall is 3937 mm, most of which falls between June-September [15].

Results and Discussion

The plant species found in the studied area can be categorized into three groups: i) Trees, ii) Shrubs and iii) Herbs. Each group again can be categorized into two: i) natural and ii) planted plant species. The result showed that naturally grown and planted shrubs were in highest portion of total plant species (44%) in the area of Vicechancellor's Bungalow of SAU (Figure 3). Plant genetic diversity found in that area are given in Table 2. The largest portion (42%) of plant species were planted trees in the area of Dairy Farm adjacent to SAU (Figure 4). A fourth quarter percent is naturally grown trees and the least minority around 4% was artificially planted herb. Therefore, it is concerned that the natural tree is being transferred to planted tree and it leads to biodiversity changes in hilly areas. Plant species are grown in that area is shown in Table 3. Natural trees were the highest portion (38%) of total plant genetic diversity in the hilly areas of M.C. College adjacent to SAU, whereas shrubs (planted) ranked the second highest in plant population (Figure 5 and Figure 6). The list of plant species of some selected plant species are shown in the Table 4. The list of plants grown in plain land of SAU is shown in Table 5.

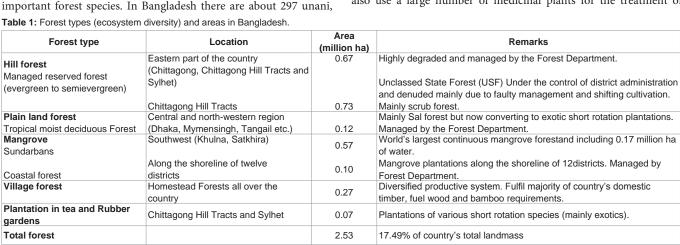


Several medicinal plant species were found in hilly areas (Table 7). Most interestingly, a number of plant species were found which were grown in site-specific areas (Table 8).

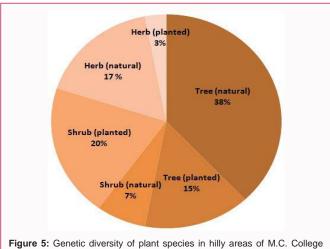
Medicinal plants

Bangladesh is very rich in medicinal plants and it has more than 500 medicinal plant species [16]. An alarmingly populous, but size wise a very small country is rather unique in having diversified genetic resources in a wide range of habitats. Increasing population pressure and multifarious anthropogenic activities on the natural ecosystems are posing severe and serious threats to once dense and rich genetically diversified plant communities of this country. Loss of habitats from the wild forests as well as from the village groves, cultivated plains and wild lands is quite common in this country. A broad genetic base has been replaced by a narrow one, and the indigenous old genetic diversity is disappearing both inside and outside of the ancient gene centers. This trend is inevitable with the need for highly efficient and uniform cultivars in advanced and sophisticated farming systems. At present, we have no real protected area for natural genetic resources and also have no specific practical policy on conservation of biodiversity. Although there are several gene banks having limited facilities to preserve some economic crops like rice, jute, wheat, pulses etc in Bangladesh, but there is no centralized organization to maintain germplasms of the wild relatives for agriculture, horticulture, medicinal and economically less important forest species. In Bangladesh there are about 297 unani,





Source: [12,13].



adjacent to SAU.

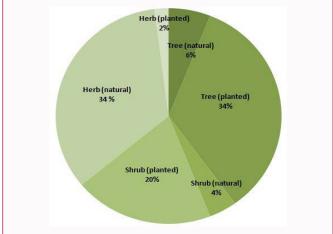


Figure 6: Genetic diversity of plant species in plain land of SAU campus.

204 ayurvedic and 77 homeopatheic drug manufacturing industries where the medicinal plants are extensively used in both raw and semi-processed forms of medicine in various pharmaceutical dose formulations. These plants also serve as important raw materials for many modern medicinal preparations. The market value of drugs produced by these industries from medicinal plants is about Tk. 300 cores [17]. Besides, village Kobiraj, street Vendors and Tribal people also use a large number of medicinal plants for the treatment of Table 2: List of plant species found in Vice-chancellor's bungalow of SAU.

No.	Local Name	English Name	Scientific Name	No. of Plants	Types
1.	Bot	Banyan Tree	Ficus bengalensis	8	Tree (natural)
2.	Bash	Bamboo	Bambuseae	6	Tree (natural)
3.	Kola	Banana	Musa sapientum	9	Tree (natural)
4.	Tula	cotton	Bombax ceiba	3	Tree (natural)
5.	Randy	Rain tree	Albizia saman	7	Tree (natural)
6.	Pichli	not found	not found	7	Tree (natural)
7.	Tetul	Tamarind	Tamarindus indica	11	Tree (natural)
8.	Kantal	Jackfruit	Artocarpus heterophyllus	15	Tree (planted)
9.	Krishnochura	Flamboyant	Delonix regia	4	Tree (planted)
10.	Amra	Hong plum	Spondias pinnata	1	Tree (planted)
11.	Am	Mango	Mangifera indica	19	Tree (planted)
12.	Boroi	Jujube fruit tree	Zyzyphus mauritiana	13	Tree (planted)
13.	Jam	Black plum	Syzygium cumini	9	Tree (planted)
14.	Neem	Indian Lilac	Azadirachchta indica	7	Tree (planted)
15.	Pepe	Papaya	Carica papaya	1	Tree (planted)
16.	Fodar	not found	not found	25	Shrub (natural)
17.	Kewa	not found	not found	19	Shrub (natural)
18.	Bet	not found	not found	Unlimited	Shrub (natural)
19.	Telakucha	not found	not found	1	Shrub (natural)
20.	Dainer Hathpao	not found	not found	1	Shrub (natural)
21.	Krishnochura			1	Shrub (natural)
		Flamboyant	Delonix regia		, ,
22.	Lojjaboti	Memosa	Mimosa pudica	Unlimited	Shrub (natural)
23.	Kata Mehedi	Golden Dewdrops	Duranta repens	3	Shrub (natural)
24.	Rongon	Scarlet Jungleflame	Ixora coccinea	11	Shrub (planted)
25.	Gada	Marigold	Tagetes erecta Linn	About 200	Shrub (planted)
26.	Bakul	Indian medlar	Mimosops elengi	2	Shrub (planted)
27.	Debdaru	Ashoka	Polythia longifolia	19	Shrub (planted)
28.	Morog ful	Texas plant	Celosia argntea	About 100	Shrub (planted)
29.	Christmas tree	Christmas tree	Picea abies	9	Shrub (planted)
30.	Thuja	Arborvitae	Thuja occidentalis	13	Shrub (planted)
31.	Noyon tara	Periwinkle	Vinea rosea	9	Shrub (planted)
32.	Joba	China rose	Hibiscus rosa-sinensis	5	Shrub (planted)
33.	Radha chura	Dwarf Poinciana	Caesalpinia pulcherrima	1	Shrub (planted)
34.	Gondhoraj	Gardenia	Gardenia jasminoides	8	Shrub (planted)
35.	Hasnahena	Night-blooming jasmine	Cestrum octurnum	2	Shrub (planted)
36.	Kamini	Orange Jasmine	Murraya exotiea	1	Shrub (planted)
37.	Korobi	Oleander	Nerium oleander	4	Shrub (planted)
38.	Lebu	Citrus/Lemon	Citrus limon	33	Shrub (planted)
39.	Dahlia	Dahlia	Dahlia hybrida	23	Shrub (planted)
40.	Bottle brush	Bottle brush	Callislemon lanecolatus	11	Shrub (planted)
41.	Botam ful	Common Globe Amaranth	Gomphrena globosa	6	Shrub (planted)
42.	Surjo mukhi	Sun flower	Helianthus annus	5	Shrub (planted)
43.	Beliful	Arabian jasmine	Jasminum sambac	7	Shrub (planted)
44.	Bagan bilash	Gardenia	Bougainvillea spectabilis	15	Shrub (planted)
45.	Golap	Rose	Rosa chinensis	8	Shrub (planted)
46.	Nageshar chapa	Ceylon Ironwood	Messua ferrea	1	Shrub (planted)

No.	Local Name	English Name	Scientific Name	No. of Plants	Types
47.	Sylvia	Sylvia	Saluia pratennis	About 50	Shrub (planted)
48.	Ada	Ginger plant	Zingiber Officinalis	19	Shrub (planted)
49	Petunia	Petunia	Petunia Inflorescence	3	Shrub (planted)
50	Pine	Pine tree	Pinus sylvestris	5	Shrub (planted)
51	Dhekishak	Fern	Dryopteris serratodentala	Unlimited	Herb (natural)
52	Kashordam	Water primsose	Ludwigia adseendens	Unlimited	Herb (natural)
53	Amrul shak	Indian sorree	Oxalin europaea	Unlimited	Herb (natural)
54	Kanduli	Nudiflora	Murdannia nudiflora	Unlimited	Herb (natural)
55	Ket para	not found	Hedyotis corymbosa	Unlimited	Herb (natural)
56	Halud Nakful	not found	Whlenbergia marginata	Unlimited	Herb (natural)
57	Bon sharisha	Wild mustard	Brassica kaber	Unlimited	Herb (natural)
58	Kanai bashi	Spider wort	Commelina bengalensis	Unlimited	Herb (natural)
59	Mikania lata	not found	Mikania scandens	Unlimited	Herb (natural)
60	Helencha	Ocepin water primrose	Jessica repens	Unlimited	Herb (natural)
61	Carpet Grass	Carpet grass	Axonopus compressus	Unlimited	Herb (planted)
62	Kata Notey	Spiny pig weed	Amaranthus spinosus	Unlimited	Herb (planted)

No.	Species	English Name	Scientific Name	No. of Plants	Types
1.	Randy	Rain tree	Albizia saman	13	Tree (natural)
2.	Tetul	Tamarind	Tamarindus indica	1	Tree (natural)
3.	Neem	Indian Lilac	Azadirachchta indica	150	Tree (natural)
4.	Jam	Black plum	Syzygium cumini	6	Tree (natural)
5.	Pahari raintree	Raintree	Albizia saman	15	Tree (natural)
6.	Mon	Indian pennywort	Centella asiatica	7	Tree (natural)
7.	kola	Banana	Musa sapientum	18	Tree (natural)
8.	Pichli	not found	not found	250	Tree (natural)
9.	Fodar	not found	not found	60	Tree (natural)
10.	Booti Jam	not found	not found	200	Tree (natural)
11.	Bot	Banyan Tree	Ficus bengalensis	8	Tree (natural)
12.	Awaal	not found	not found	150	Tree (natural)
13.	Kadom	Wild cinchona	Anthocephalus chinensis	5	Tree (planted)
14.	Chalta	Indian dellenia	Dillenia indica	1	Tree (planted)
15.	Mandar	Indian Coral Tree	Erythrina variegata	1	Tree (planted)
16.	Arjun	White Marudah	Terminalia arjuna	100	Tree (planted)
17.	Matang	White Meranti	Shorea assamica	15	Tree (planted)
18.	Jarul	Giant Crape Myrtle	Lagerstroemia flosreginae	60	Tree (planted)
19.	Geol	not found	not found	6	Tree (planted)
20.	Albizia	Frywood	Albizia lebbeck	3	Tree (planted)
21.	Shegun	Teak	Tectona grandis	6	Tree (planted)
22.	Borishali Amra	Hog plum	Spondias mangifera	1	Tree (planted)
23.	Shishoo	Indian Rosewood	Dalbergia sissoo	12	Tree (planted)
24.	Agar	Agarwood	Aquilaria sinensis	10	Tree (planted)
25.	Am	Mango	Mangifera indica	15	Tree (planted)
26.	Koroi	White Siris	Albizia procera	150	Tree (planted)
27.	Akashi	Dillenia	Dilleniascabrella roxb	60	Tree (planted)
28.	Mehgoni	Honduras Mahogany	Swietenia macrophylla	150	Tree (planted)
29.	Kantal	Jackfruit	Artocarpus heterophyllus	8	Tree (planted)

No.	Species	English Name	Scientific Name	No. of Plants	Types
30.	Simul	Red Silk-Cotton	Bombax ceiba	4	Tree (planted)
31.	Betelnut	Areca Palm	Areca catechu	21	Tree (planted)
32.	Coconut	Coconut Tree	Cocos nucifera	11	Tree (planted)
33.	Jalpai	Indian Olive	Elaeocarpus floribundus	5	Tree (planted)
34.	Karpur	Camphor	Cinnamomum camphora	8	Tree (planted)
35.	Jarul	Giant Crape-myrtle	Lagerstroemia speciosa	6	Tree (planted)
36.	Bakul	Spanish cherry	Mimusops elengi	9	Tree (planted)
37.	Bash	Bamboo	Bambuseae bamboo	19	Tree (natural)
38.	Litchu	Litchi	Litchi chinensis	9	Tree (planted)
39.	Guava	Guava	Psidium guajava	9	Tree (planted)
40.	Pepe	Papaya	Carica papaya	27	Tree (planted)
41.	Citrus	Citrus	Citrus limon	19	Tree (planted)
42.	Tula	cotton	Bombax ceiba	7	Tree (planted)
43.	Nageshar chapa	Ceylon Ironwood	Messua ferrea	1	Shrub (natural)
44.	Lojjaboti	Memosa	Mimosa pudica	many	Shrub (natural)
45.	Kata Mehedi	Golden Dewdrops	Duranta repens	3	Shrub (natural)
46	Nageshar chapa	Ceylon Ironwood	Messua ferrea	1	Shrub (natural)
47	Beliful	Arabian jasmine	Jasminum sambac	5	Shrub (planted)
48	Bagan bilash	Gardenia	Bougainvillea spectabilis	19	Shrub (planted)
49	Golap	Rose	Rosa chinensis	5	Shrub (planted)
50	Surjo mukhi	Sun flower	Helianthus annus	7	Shrub (planted)
51	Sylvia	Sylvia	Saluia pratennis	about 40	Shrub (planted)
52	Ada	Ginger plant	Zingiber Officinalis	19	Shrub (planted)
53	Rujot (Medicinal)	not found	not found	7	Herb (natural)
54	Sheowra	not found	not found	many	Herb (natural)
55	Lutki	Lotkon	Canscoraandrographioides	about 10000	Herb (natural)
56	Olotcombol	Not found	Abroma agusta	1	Herb (natural
57	Bonjamra	not found	not found	60	Herb (natural)
58	Bekoi	not found	not found	many	Herb (natural)
59	Bonam	not found	not found	1	Herb (natural)
60	Saakni	not found	not found	7	Herb (natural)
61	Pathgatua	not found	not found	19	Herb (natural)
62	Bonaak	not found	not found	7	Herb (natural)
63	Kolum weed	not found	not found	about 10000	Herb (natural)
64	Deshi gash	Sedge	Carex caespititia	many	Herb (natural)
65	Satni	not found	not found	3	Herb (natural)
66	German gash	German grass	not found	many	Herb(planted)
67	Napier Gash	not found	not found	many	Herb (planted)

Table 4: List of plant species found in the hilly areas of M.C. College adjacent to SAU.

No.	Local Name	English Name	Scientific Name	No. of Plants	Types
1.	Bot	Banyan Tree	Ficus bengalensis	8	Tree (natural)
2.	Bash	Bamboo	Bambuseae	6	Tree (natural)
3.	kola	Banana	Musa sapientum	9	Tree (natural)
4.	Tula	cotton	Bombax ceiba	3	Tree (natural)
5.	Randy	Rain tree	Albizia saman	7	Tree (natural)
6.	Pichli	not found	not found	7	Tree (natural)

No.	Local Name	English Name	Scientific Name	No. of Plants	Types
7.	Tetul	Tamarind	Tamarindus indica	11	Tree (natural)
8.	kantal	Jackfruit	Artocarpus heterophyllus	15	Tree (natural)
9.	Krishnochura	Flamboyant	Delonix regia	4	Tree (natural)
10.	Amra	Hong plum	Spondias pinnata	1	Tree (natural)
11.	Am	Mango	Mangifera indica	19	Tree (natural)
12.	Boroi	Jujubefruit tree	Zyzyphus mauritiana	13	Tree (natural)
13.	Jam	Black plum	Syzygium cumini	9	Tree (natural)
14.	Neem	Indian Lilac	Azadirachchta indica	7	Tree (natural)
15.	Awaal	not found	not found	21	Tree (natural)
16.	Batna	not found	Cyclobalanopsis oxyodon	25	Tree (natural)
17.	Pahari raintree	Raintree	Albizia saman	19	Tree (natural)
18.	Mon	Indian pennywort	Centella asiatica	7	Tree (natural)
19.	Booti Jam	not found	not found	200	Tree (natural)
20.	Kodom	not found	not found	5	Tree (natural)
21.	Kaimula Kaiyengla	not found	Glochidion sphaerogynum	4	Tree (natural)
22.	Ram Gua	not found	pinanga gracilis BL	3	Tree (natural)
23.	Lohamori Khalta	not found	Lithocarpus thomsonii	7	Tree (natural)
24.	Bhuiya Gachh, Bonsum, Bonjolukia	not found	Cryptocarya amygdalina	7	Tree (natural)
25.	Kude jam	not found	not found	21	Tree (natural)
26.	Bandor Shasha	not found	Cucumis hystrix	8	Tree (natural)
27.	not found	not found	Hedychium speciosum	6	Tree (natural)
28.	kantal	Jackfruit	Artocarpus heterophyllus	11	Tree (planted)
29.	Kamranga	Carambola	Averrhoa carambola	3	Tree (planted)
30.	Simul	Red Silk-Cotton	Bombax ceiba	2	Tree (planted)
31.	Betelnut	Areca Palm	Areca catechu	22	
32.	Narikel	Coconut Tree	Cocos nucifera	19	Tree (planted)
33.	Jalpai	Indian Olive	Elaeocarpus floribundus	19	Tree (planted) Tree (planted)
	<u> </u>			7	" ,
34.	Karpur	Camphor	Cinnamomum camphora		Tree (planted)
35.	Bash	Bamboo	Bambuseae bamboo	7	Tree (planted)
36.	Litchu	Litchi	Litchi chinensis	3	Tree (planted)
37.	Guava	Guava	Psidium guajava	8	Tree (planted)
38.	Pepe	Papaya	Carica papaya	11	Tree (planted)
39.	Fodar	not found	not found	25	Shrub (natural)
40.	Kewa	not found	not found	19	Shrub (natural)
41.	Bet	not found	not found	many	Shrub (natural)
42.	Telakucha	not found	not found	1	Shrub (natural)
43.	Dainer Hathpao	not found	not found	1	Shrub (natural)
44.	Citrus	Citrus	Citrus limon	17	Shrub(planted)
45.	Bottle brush	Bottle brush	Callislemon lanecolatus	17	Shrub (planted)
46.	Rongon	Scarlet Jungleflame	Ixora coccinea	13	Shrub (planted)
47.	Dahlia	Dahlia	Dahlia hybrida	27	Shrub (planted)
48.	Gada	Marigold	Tagetes erecta Linn	About 100	Shrub (planted)
49	Morog ful	Texas plant	Celosia argntea	About 100	Shrub (planted)
50	Christmas tree	Christmas tree	Picea abies	11	Shrub (planted)
51	Thuja	Arborvitae	Thuja occidentalis	15	Shrub (planted)
52	Noyon tara	Periwinkle	Vinea rosea	9	Shrub (planted)
53	Joba	China rose	Hibiscus rosa-sinensis	7	Shrub (planted)

No.	Local Name	English Name	Scientific Name	No. of Plants	Types
54	Gondhoraj	Gardenia	Gardenia jasminoides	9	Shrub (planted)
55	Hasnahena	Night-blooming jasmine	Cestrum octurnum	7	Shrub (planted)
56	Kamini	Orange Jasmine	Murraya exotiea	3	Shrub (planted)
57	Korobi	Oleander	Nerium oleander	12	Shrub (planted)
58	Lutki	not found	Canscora andrographioides	150-200	Herb (natural)
59	kolum	not found	not found	many	Herb (natural)
60	Bonam	not found	not found	4	Herb (natural)
61	Tulsi	not found	Ocimum americanum	many	Herb (natural)
62	Chapra	Goose grass	Eleusina indica	many	Herb (natural)
63	Fulka	Leptochloa grass	Leptochloa chinensis	many	Herb (natural)
64	Chesra	Bulrush	Scirpus juncoides	many	Herb (natural)
65	Prem Kata	Love thorn	Chrysopogon aciculatun	many	Herb (natural)
66	Halud Nakful	not found	Whlenbergia marginata	many	Herb (natural)
67	Biskatali	Smane weed	Polygnom nyclonopiper	many	Herb (natural)
68	Durba	Bermuda grass	Cynodom doctylon	many	Herb (natural)
69	Gash	Sedge	Carex caespititia	many	Herb (natural)
70	Fan Kachu	Colocasia	Colocasia virosa	many	Herb(planted)
71	Anna Kachu	Colocasia	Colocasia mannii	many	Herb(planted)

Table 5: List of plant species in plain land of SAU.

No.	Local Name	English Name	Scientific Name	No. of Plants	Types
1.	Krishnochura	Royal Poinciana	Delonix regia	2	Tree (natural)
2.	Bash	Bamboo	Bambuseae bamboo	7	Tree (natural)
3.	Neem	Indian Lilac	Azadirachchta indica	7	Tree (natural)
4.	Khudejam		Syzygium fruticosum	5	Tree (natural)
5.	Boroi	Jujube fruit tree	Zyzyphus mauritiana	11	Tree (natural)
6.	Kadam	Wild cinchona	Anthocephalus chinensis	3	Tree (natural)
7.	Akashmoni	Ear leaf acacia	Acacia auriculiformis	4	Tree (planted)
8.	Mangium	Brown salwood	Acacia mangium	2	Tree (planted)
9.	Banana	Banana	Musa sapientum	29	Tree (planted)
10.	khoir	black cutch	Acacia catechu	1	Tree (planted)
11.	Kalokoroi/Sirish	Woman's Tongue tree	Albizia lebbeck	2	Tree (planted)
12.	Raintree	Rain tree	Albizia saman	13	Tree (planted)
13.	lpil-lpil	White lead tree	Leucaena leucocephala	1	Tree (planted)
14.	Bot	Banyan Tree	Ficus bengalensis	9	Tree (planted)
15.	Amloki	Indian gooseberry	Phyllanthus emblica	4	Tree (planted)
16.	Day fal	False Mangosteen	Garcinia xanthochymus		Tree (planted)
17.	Minjiri	Kassod Tree	Cassia siamea	1	Tree (planted)
18.	Telsur	Rock Dammar	Hopea odorata	1	Tree (planted)
19.	Bilimbi	Bilimbi	Averrhoa bilimbi	2	Tree (planted)
20.	Tentul	Tamarind	Tamarindus indica	1	Tree (natural)
21.	Polash	Sacred Tree	Butea monosperma	2	Tree (planted)
22.	Arhar	Pigeon pea	Cajanus cajan	1	Tree (planted)
23.	Debdaru	Ashoka Tree	Polyalthia longifolia	21	Tree (planted)
24.	Arjun	Arjuna myrobalan	Terminalia arjuna	2	Tree (planted)
25.	Bohera	Beleric myrobalan	Terminalia bellirica	2	Tree (planted)
26.	Horitoki	Gall nut	Terminalia chebula	1	Tree (planted)
27.	Amra	Hong plum	Spondias pinnata	1	Tree (planted)

No.	Local Name	English Name	Scientific Name	No. of Plants	Types
28.	Am	Mango	Mangifera indica	27	Tree (planted)
29.	Jam	Black plum	Syzygium cumini	2	Tree (planted)
30.	Mahgoni	Honduras Mahogany	Swietenia macrophylla	1	Tree (planted)
31.	kantal	Jack fruit	Artocarpus heterophyllus	11	Tree (planted)
32.	Kamranga	Carambola	Averrhoa carambola	1	Tree (planted)
33.	Simul	Red Silk-Cotton	Bombax ceiba	2	Tree (planted)
34.	Betelnut	Areca Palm	Areca catechu	23	Tree (planted)
35.	Narikel	Coconut Tree	Cocos nucifera	13	Tree (planted)
36.	Jalpai	Indian Olive	Elaeocarpus floribundus	1	Tree (planted)
37.	Karpur	Camphor	Cinnamomum camphora	7	Tree (planted)
38.	Jarul	Giant Crape-myrtle	Lagerstroemia speciosa	5	Tree (planted)
39.	Bakul	Spanish cherry	Mimusops elengi	2	Tree (planted)
40.	Litchu	Litchi	Litchi chinensis	3	Tree (planted)
41.	Guava	Guava	Psidium guajava	8	Tree (planted)
42.	Pepe	Papaya	Carica papaya	19	Tree (planted)
43.	Tula	Cotton	Bombax ceiba	2	Tree (planted)
44.	Nageshar chapa	Ceylon Ironwood	Messua ferrea	1	Shrub (natural)
45.	Lojjaboti	Memosa	Mimosa pudica	many	Shrub (natural)
46.	Kata Mehedi	Golden Dewdrops	Duranta repens	3	Shrub (natural)
47.	Krishnochura	Flamboyant	Delonix regia	4	Shrub (natural)
48.	Mehedi	Henna	Lawsonia inermis	3	Shrub (planted)
49.	Citrus	Citrus	Citrus limon	17	Shrub(planted)
50.	Botam ful	Common Globe Amaranth	Gomphrena globosa	5	Shrub (planted)
51.	Bakul	Indian medlar	Mimosops elengi	3	Shrub (planted)
52.	Debdaru	Ashoka	Polythia longifolia	17	Shrub (planted)
53.	Surjo mukhi	Sun flower	Helianthus annus	5	Shrub (planted)
54.	Beliful	Arabian jasmine	Jasminum sambac	6	Shrub (planted)
56.	Bagan bilash	Gardenia	Bougainvillea spectabilis	14	Shrub (planted)
57.	Golap	Rose	Rosa chinensis	3	Shrub (planted)
58.	Ada	Ginger plant	Zingiber officinalis	18	Shrub (planted)
59.	Petunia	Petunia	Petunia inflorescence	3	Shrub (planted)
60.	Pine	Pine tree	Pinus sylvestris	4	Shrub (planted)
61.	Kamini	Orange Jasmine	Murraya exotiea	1	Shrub (planted)
62.	Korobi	Oleander	Nerium oleander	1	Shrub (planted)
63.	Dahlia	Dahlia	Dahlia hybrida	37	Shrub (planted)
64.	Bottle brush	Bottle brush	Callislemon lanecolatus	19	Shrub (planted)
65.	Rongon	Scarlet Jungleflame	Ixora coccinea	11	Shrub (planted)
66.	Krishnochura	Peacock flower	Delonix regia	4	Shrub (planted)
67.	Sylvia	Sylvia	Saluia pratennis	About 60	Shrub (planted)
68.	Gada	Marigold	Tagetes erecta Linn	About 200	Shrub (planted)
69.	Kashuripana	Water hyacinth	Eictthornia arassepes	many	Herb (natural)
70.	Shapla	Water Lily	Nymphaea nouchali	many	Herb (natural)
71.	Mutha	not found	Cypyrus rotendos	many	Herb (natural)
72.	Sobuj Nakful	not found	Cypyrus deformis	many	Herb (natural)
73.	Ulu	Cogon grass	Imperala cylindrica	many	Herb (natural)
74.	Arail	Swamp rice grass	Lecersia hexandra	many	Herb (natural)
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No.	Local Name	English Name	Scientific Name	No. of Plants	Types
76.	Kalmilata	not found	Ipomoea aquatica	many	Herb (natural)
77.	Joina	not found	Schleichera oleosa	many	Herb (natural)
78.	Tulsi	not found	Ocimum americanum	many	Herb (natural)
79.	Pani long	Winged water	Ludarigia octovalvis	many	Herb (natural)
80.	Chagla gocha	not found	Ageratum conyzoides	many	Herb (natural)
81.	Dhekishak	Fern	Dryopteris serratodentala	many	Herb (natural)
82.	Kashordam	Water primsose	Ludwigia adseendens	many	Herb (natural)
83.	Amrul shak	Indian sorree	Oxalin europaea	many	Herb (natural)
84.	Kanduli	Nudiflora	Murdannia nudiflora	many	Herb (natural)
85.	Ket para	not found	Hedyotis corymbosa	many	Herb (natural)
86.	Halud Nakful	not found	Whlenbergia marginata	many	Herb (natural)
87.	Bon sharisha	Wild mustard	Brassica kaber	many	Herb (natural)
88.	Kanai bashi	Spider wort	Commelina bengalensis	many	Herb (natural)
89.	Mikania lata	not found	Mikania scandens	many	Herb (natural)
90.	Helencha	Ocepin water primrose	Jessica repens	many	Herb (natural)
91.	Bathua	Lambsquarter	Chenopodium album	many	Herb (natural)
92.	Kata Notey	Spiny pig weed	Amaranthus spinosus	many	Herb (natural)
93.	Khuda Shama	Jungle grass	Echinocholoa colonum	many	Herb (natural)
94.	Durba	Bermuda grass	Cynodom doctylon	many	Herb (natural)
95.	Chapra	Goose grass	Eleusina indica	many	Herb (natural)
96.	Fulka	Leptochloa grass	Leptochloa chinensis	many	Herb (natural)
97.	Chesra	Bulrush	Scirpus juncoides	many	Herb (natural)
98.	Chanchi	not found	Alternanihena sessilis	many	Herb (natural)
99.	Carpet Grass	Carpet grass	Axonopus compressus	many	Herb (natural)
100.	Fulchaise	not found	Cyperus nomonalis	many	Herb (natural)
101.	Chira ghas	not found	Saripus supinus	many	Herb (natural)
102.	Prem Kata	Love thorn	Chrysopogon aciculatun	many	Herb (natural)
103.	Ban Mula	Wild radish	Raphanus raphanistrum	many	Herb (natural)
104.	Biskatali	Smane weed	Polygnom nyclonopiper	many	Herb (natural)
105.	Napier Gash	not found	not found	many	Herb (planted)
106.	Para gash	Para grass	not found	many	Herb (planted)

Table 6: List of plant species found in Medicinal plant adjacent to SAU campus.

No.	Local Name	English Name	Scientific Name	Types
1.	Banana	Banana	Musa sapientum	Tree (planted)
2.	Amloki	Indian gooseberry	Phyllanthus emblica	Tree (planted)
3.	Day fal	False Mangosteen	Garcinia xanthochymus	Tree (planted)
4.	Telsur	Rock Dammar	Hopea odorata	Tree (planted)
5.	Bilimbi	Bilimbi	Averrhoa bilimbi	Tree (planted)
6.	Tentul	Tamarind	Tamarindus indica	Tree (natural)
7.	Horitoki	Gall nut	Terminalia chebula	Tree (planted)
8.	Amra	Hong plum	Spondias pinnata	Tree (planted)
9.	Jam	Black plum	Syzygium cumini	Tree (planted)
10.	Khudejam		Syzygium fruticosum	Natural
11.	Neem	Indian Lilac	Azadirachchta indica	Tree (natural)
12.	kantal	Jackfruit	Artocarpus heterophyllus	Tree (planted)
13.	Kamranga	Carambola	Averrhoa carambola	Tree (planted)
14.	Betelnut	Areca Palm	Areca catechu	Tree (planted)

No.	Local Name	English Name	Scientific Name	Types
15.	Coconut	Coconut Tree	Cocos nucifera	Tree (planted)
16.	Jalpai	Indian Olive	Elaeocarpus floribundus	Tree (planted)
17.	Arhar	Pigeon pea	Cajanus cajan	Tree (planted)
18.	Bakul	Spanish cherry	Mimusops elengi	Tree (planted)
19.	Arjun	Arjuna myrobalan	Terminalia arjuna	Tree (planted)
20.	Bohera	Beleric myrobalan	Terminalia bellirica	Tree (planted)
21.	Litchu	Litchi	Litchi chinensis	Tree (planted)
22.	Guava	Guava	Psidium guajava	Tree (planted)
23.	Pepe	Papaya	Carica papaya	Tree (planted)
24.	Citrus	Citrus	Citrus limon	Tree (planted)
25.	Khuda Shama	Jungle grass	Echinocholoa colonum	Herb (natural)
26.	Mehedi	henna	Lawsonia inermis	Tree (planted)
27.	Chanchi	not found	Alternanihena sessilis	Herb (natural)
28.	Chira ghas	not found	Saripus supinus	Herb (natural)
29.	Prem Kata	Love thorn	Chrysopogon aciculatun	Herb (natural)
30.	Ban Mula	Wild radish	Raphanus raphanistrum	Herb (natural)
31.	Biskatali	Smane weed	Polygnom nyclonopiper	Herb (natural)
32.	Bathua	Lambsquarter	Chenopodium album	Herb (natural)
33.	Kata Notey	Spiny pig weed	Amaranthus spinosus	Herb (natural)
34.	Pani long	Winged water	Ludarigia octovalvis	Herb (natural)
35.	Chagla gocha	not found	Ageratum conyzoides	Herb (natural)
36.	Dhekishak	Fern	Dryopteris serratodentala	Herb (natural)
37.	Kashordam	Water primsose	Ludwigia adseendens	Herb (natural)
38.	Amrul shak	Indian sorree	Oxalin europaea	Herb (natural)
39.	Kanduli	Nudiflora	Murdannia nudiflora	Herb (natural)
40.	Chalta	Indian dellenia	Dillenia indica	Tree (planted)
41.	Mandar	Indian Coral Tree	Erythrina variegata	Tree (planted)
42.	Bon sharisha	Wild mustard	Brassica kaber	Herb (natural)
43.	Lojjaboti	Memosa	Mimosa pudica	Shrub (natural)
44.	Helencha	Ocepin water primrose	Jessica repens	Herb (natural)
45.	Shapla	Water lily	Nymphaea nouchali	Herb (natural)
46.	Mutha	not found	Cypyrus rotendos	Herb (natural)
47.	Bakul	Indian medlar	Mimosops elengi	Shrub (planted)
48.	Fan Kachu	Colocasia	Colocasia virosa	Shrub (natural)
49.	Anna Kachu	Colocasia	Colocasia mannii	Herb (natural)
50.	Nunia	Common purlane	Portulaca otenareca	Herb (natural)
51.	Kalmilata	not found	Ipomoea aquatica	Herb (natural)
52.	Tulsi	not found	Ocimum americanum	Herb (natural)
53.	Lutki	not found	Canscora andrographioides	Herb (natural)
54.	Goddhipata	not found	Dalhousiea bracteata	Natural(Shrub)
56.	Rujot (Medicinal plant)	not found	not found	Herb (natural)
57.	Satni	not found	not found	Herb (natural)
58.	Dainer Hath paa	Common ash	Fraxinus excelsior	Tree (natural)
59.	Batna	not found	Cyclobalanopsis oxyodon	Tree (natural)
60.	Bandor Shasha	not found	Cucumis hystrix	Tree (natural)
61.	Lohamori Khalta	not found	Lithocarpus thomsonii	Tree (natural)
62.	kola	Banana	Musa sapientum	Tree (planted)

No.	Local Name	English Name	Scientific Name	Types
63.	Olotcombol	Not found	Abroma agusta	Herb (natural
64.	Shishoo	Indian Rosewood	Dalbergia sissoo	Tree (planted)
65.	Mon	Indian pennywort	Centella asiatica	Tree (natural)
66.	Joba	China rose	Hibiscus rosasinensis	Shrub (planted)
67.	Gondhoraj	Gardenia	Gardenia jasminoides	Shrub (planted)
68.	Surjo mukhi	Sun flower	Helianthus annus	Shrub (planted)

Table 7: Medicinal Uses of some important medicinal plants found in SAU campus.

No	Medicinal plants	Habit and Habitat	Uses
1.	Sylvia (Celosia Criatata L)	Herb Found in SAU campus	The plant is used in biliousness, dysentery, diarrhea, painful menstruation, snake-bite and also used as demulcent, alexiteric, astringent, emollient for opthalmia.
2.	Bonnobotaphul (Gomphrena Celosioides Mart)	Herb Waste lands, roadsides, dry sandy soil.	This weed also causes, it is claimed, skin problems in cattle, and hay fever, asthma and dermatitis in some people.
3.	Latamouri, Digera.(Digera Muricata (L.) Mart)	Herb Cultivated lands and along roadsides.	Plant is cooling, astringent to the bowels in small doses and laxative in large doses; useful in biliousness. <i>Flowers</i> and seeds are useful in urinary discharges.
4.	Goburanotey (Amaranthus Lividus Willd)	Herb Roadsides,waste lands.	The boiled leaves and roots are given to children as a laxative; they are applied as an emollient poultice to abscessess, boils and burns. Root juice along with sugar or molasses is given in dysentery.
5.	Boroapang (Cyathula Capitata Moq)	Herb Roadsides and dry grassy places	Used for some medicinal purposes against cough, dysentery, cholera and intestinal worms.
6.	Shaknotey (Amaranthus Viridis L.)	Herb Found in SAU campus	The plant is cooling, alexiteric, laxative, stomachic, appetizer and antipyretic; used in burning sensation, hallucination, leprosy, bronchitis, piles, leucorrhoea and constipation. The leaves are used as an emollient. The root is heating and expectorant; lessens the menstrual flow; useful in leucorrhoea and leprosy
7.	Datashak,Notiyasag (Amaranthus Blitum L)	Herb. Found in SAU campus	This plant is used as stomachic, good remedy for the roundworm, emollient and it also used in biliousness, haemorrhagic-diathesis and blisters.
8.	Kantanotey (Amaranthus Spinosus L)	Herb Found in SAU campus	The plant is cooling, laxative, diuretic, stomachic, antipyretic and galactagogue; improves appetite; useful in burning sensation, hallucination, leprosy, piles, bronchitis, leucorrhoea, constipation and flatulence.
9.	Malancha Shak (Alternanthera hiloxeroides)	Herb Found in SAU campus	Plant is used for hazy vision, night blindness, malaria, post natal complaints, prolapsus ani, fistulas ani, diarrhoea, dysentery and puerperal fever.
10.	Chanchi,Sanchi-shak. (Alternanthera Sessilis)	Herb Found in SAU campus	Plant is galactagogue, cholagogue and febrifuge; Decoction with little salt is drunk to check blood vomiting.

Table 8: Site-specific (hilly areas/plain lands) plant species.

kola (Musa sapientum) Lutki (Canscora andrographioides) Fodar Fodar Khuda Shama (Echinocholoa colonum) Pichli Durba (Cynodom doctylon) Kewa Chapra (Eleusina indica) kolum Fulka (Leptochloa chinensis) Bet Chesra (Scirpus juncoides) Fan Kachu (Colocasia virosa) Anna Kachu (Colocasia virosa) Carpet Grass (Axonopus compressus) Bash (Bambuseae bamboo) Ban Mula (Raphanus raphanistrum) Neem (Azadirachchta indica) Biskatali (Polygnom nyclonopiper) Randy (Albizia saman) Shewtadrone (Leucas aspera) Bot Dainer Hathpao Awaal Batna (Cyclobalanopsis oxyodon) Pahari raintree (Albizia saman) Mededi (Lawsonia inermis)	No.	Plant species found only in hilly areas, not in plain land	Plant species found only in plain land, not in hilly areas
Fodar Fodar Khuda Shama (Echinocholoa colonum) Pichli Durba (Cynodom doctylon) Kewa Chapra (Eleusina indica) Kolum Fulka (Leptochloa chinensis) Bet Chesra (Scirpus juncoides) Fan Kachu (Colocasia virosa) Chanchi (Alternanihena sessilis) Anna Kachu (Colocasia mannii) Carpet Grass (Axonopus compressus) Bash (Bambuseae bamboo) Ban Mula (Raphanus raphanistrum) Neem (Azadirachchta indica) Biskatali (Polygnom nyclonopiper) Randy (Albizia saman) Bathua (Chenopodium album) Shewtadrone (Leucas aspera) Bot Am (Mangilera indica) Dainer Hathpao Awaal Tula (Bombax ceiba) Batna (Cyclobalanopsis oxyodon) Randy (Albizia saman) Batna (Ilawsonia inermis)	1.	kola (Musa sapientum)	Pepe (Carica papaya)
Pichli Durba (Cynodom doctylon) Kewa Chapra (Eleusina indica) kolum Fulka (Leptochloa chinensis) Bet Chesra (Scirpus juncoides) Fan Kachu (Colocasia virosa) Chanchi (Alternanihena sessilis) Anna Kachu (Colocasia mannii) Carpet Grass (Axonopus compressus) Bash (Bambuseae bamboo) Ban Mula (Raphanus raphanistrum) Neem (Azadirachchta indica) Biskatali (Polygnom nyclonopiper) Randy (Albizia saman) Bathua (Chenopodium album) Shewtadrone (Leucas aspera) Kata Notey (Amaranthus spinosus) Bot Am (Mangifera indica) Dainer Hathpao Mandar (Erythrina variegata) Awaal Tula (Bombax ceiba) Batna (Cyclobalanopsis oxyodon) Randy (Albizia saman) Pahari raintree (Albizia saman) Mehedi (Lawsonia inermis)	2.	Lutki (Canscora andrographioides)	Akashmoni (Acacia auriculiformis)
Kewa Chapra (Eleusina indica) kolum Fulka (Leptochloa chinensis) Bet Chesra (Scirpus juncoides) Fan Kachu (Colocasia virosa) Chanchi (Alternanihena sessilis) Anna Kachu (Colocasia mannii) Carpet Grass (Axonopus compressus) Bash (Bambuseae bamboo) Ban Mula (Raphanus raphanistrum) Neem (Azadirachchta indica) Biskatali (Polygnom nyclonopiper) Randy (Albizia saman) Bathua (Chenopodium album) Shewtadrone (Leucas aspera) Kata Notey (Amaranthus spinosus) Bot Am (Mangifera indica) Dainer Hathpao Mandar (Erythrina variegata) Awaal Tula (Bombax ceiba) Batna (Cyclobalanopsis oxyodon) Randy (Albizia saman) Pahari raintree (Albizia saman) Mehedi (Lawsonia inermis)	3.	Fodar	Khuda Shama (Echinocholoa colonum)
kolum Fulka (Leptochloa chinensis) Bet Chesra (Scirpus juncoides) Fan Kachu (Colocasia virosa) Chanchi (Alternanihena sessilis) Anna Kachu (Colocasia mannii) Carpet Grass (Axonopus compressus) Bash (Bambuseae bamboo) Ban Mula (Raphanus raphanistrum) Neem (Azadirachchta indica) Biskatali (Polygnom nyclonopiper) Randy (Albizia saman) Bathua (Chenopodium album) Shewtadrone (Leucas aspera) Kata Notey (Amaranthus spinosus) Bot Am (Mangifera indica) Dainer Hathpao Mandar (Erythrina variegata) Awaal Tula (Bombax ceiba) Batna (Cyclobalanopsis oxyodon) Randy (Albizia saman) Pahari raintree (Albizia saman) Mehedi (Lawsonia inermis)	4.	Pichli	Durba (Cynodom doctylon)
Bet Chesra (Scirpus juncoides) Fan Kachu (Colocasia virosa) Chanchi (Alternanihena sessilis) Anna Kachu (Colocasia mannii) Carpet Grass (Axonopus compressus) Bash (Bambuseae bamboo) Ban Mula (Raphanus raphanistrum) Neem (Azadirachchta indica) Biskatali (Polygnom nyclonopiper) Randy (Albizia saman) Bathua (Chenopodium album) Shewtadrone (Leucas aspera) Kata Notey (Amaranthus spinosus) Bot Am (Mangifera indica) Dainer Hathpao Mandar (Erythrina variegata) Awaal Tula (Bombax ceiba) Batna (Cyclobalanopsis oxyodon) Randy (Albizia saman) Pahari raintree (Albizia saman) Mehedi (Lawsonia inermis)	5.	Kewa	Chapra (Eleusina indica)
Fan Kachu (Colocasia virosa) Anna Kachu (Colocasia mannii) Bash (Bambuseae bamboo) Randy (Albizia saman) Bot Bot Am (Mangifera indica) Dainer Hathpao Bathua (Cyclobalanopsis oxyodon) Bathua (Cyclobalanopsis oxyodon) Bathua (Chanchi (Alternanihena sessilis) Carpet Grass (Axonopus compressus) Ban Mula (Raphanus raphanistrum) Biskatali (Polygnom nyclonopiper) Bathua (Chenopodium album) Kata Notey (Amaranthus spinosus) Am (Mangifera indica) Mandar (Erythrina variegata) Tula (Bombax ceiba) Randy (Albizia saman) Mehedi (Lawsonia inermis)	6.	kolum	Fulka (Leptochloa chinensis)
Anna Kachu (Colocasia mannii) Bash (Bambuseae bamboo) Randy (Albizia saman) Bot Bot Am (Mangifera indica) Dainer Hathpao Awaal Bathua (Cyclobalanopsis oxyodon) Bathua (Cyslobalanopsis oxyodon) Randy (Albizia saman) Carpet Grass (Axonopus compressus) Ban Mula (Raphanus raphanistrum) Biskatali (Polygnom nyclonopiper) Bathua (Chenopodium album) Kata Notey (Amaranthus spinosus) Am (Mangifera indica) Mandar (Erythrina variegata) Tula (Bombax ceiba) Randy (Albizia saman) Mehedi (Lawsonia inermis)	7.	Bet	Chesra (Scirpus juncoides)
Bash (Bambuseae bamboo) Ban Mula (Raphanus raphanistrum) Neem (Azadirachchta indica) Biskatali (Polygnom nyclonopiper) Randy (Albizia saman) Bathua (Chenopodium album) Shewtadrone (Leucas aspera) Bot Am (Mangifera indica) Dainer Hathpao Mandar (Erythrina variegata) Awaal Tula (Bombax ceiba) Batna (Cyclobalanopsis oxyodon) Randy (Albizia saman) Pahari raintree (Albizia saman) Mehedi (Lawsonia inermis)	8.	Fan Kachu (Colocasia virosa)	Chanchi (Alternanihena sessilis)
Neem (Azadirachchta indica) Randy (Albizia saman) Shewtadrone (Leucas aspera) Bot Am (Mangifera indica) Awaal Bathua (Chenopodium album) Kata Notey (Amaranthus spinosus) Am (Mangifera indica) Mandar (Erythrina variegata) Tula (Bombax ceiba) Batna (Cyclobalanopsis oxyodon) Randy (Albizia saman) Pahari raintree (Albizia saman) Mehedi (Lawsonia inermis)	9.	Anna Kachu (Colocasia mannii)	Carpet Grass (Axonopus compressus)
Randy (Albizia saman) Bathua (Chenopodium album) Shewtadrone (Leucas aspera) Bot Am (Mangifera indica) Dainer Hathpao Mandar (Erythrina variegata) Awaal Tula (Bombax ceiba) Batna (Cyclobalanopsis oxyodon) Pahari raintree (Albizia saman) Mehedi (Lawsonia inermis)	10.	Bash (Bambuseae bamboo)	Ban Mula (Raphanus raphanistrum)
Shewtadrone (Leucas aspera) Bot Am (Mangifera indica) Dainer Hathpao Mandar (Erythrina variegata) Awaal Tula (Bombax ceiba) Batna (Cyclobalanopsis oxyodon) Pahari raintree (Albizia saman) Mehedi (Lawsonia inermis)	11.	Neem (Azadirachchta indica)	Biskatali (Polygnom nyclonopiper)
Bot Am (Mangifera indica) Dainer Hathpao Mandar (Erythrina variegata) Awaal Tula (Bombax ceiba) Batna (Cyclobalanopsis oxyodon) Randy (Albizia saman) Pahari raintree (Albizia saman) Mehedi (Lawsonia inermis)	12.	Randy (Albizia saman)	Bathua (Chenopodium album)
Dainer Hathpao Mandar (Erythrina variegata) Awaal Tula (Bombax ceiba) Batna (Cyclobalanopsis oxyodon) Randy (Albizia saman) Pahari raintree (Albizia saman) Mehedi (Lawsonia inermis)	13.	Shewtadrone (Leucas aspera)	Kata Notey (Amaranthus spinosus)
Awaal Tula (Bombax ceiba) Batna (Cyclobalanopsis oxyodon) Randy (Albizia saman) Pahari raintree (Albizia saman) Mehedi (Lawsonia inermis)	14.	Bot	Am (Mangifera indica)
Batna (Cyclobalanopsis oxyodon) Randy (Albizia saman) Pahari raintree (Albizia saman) Mehedi (Lawsonia inermis)	15.	Dainer Hathpao	Mandar (Erythrina variegata)
Pahari raintree (Albizia saman) Mehedi (Lawsonia inermis)	16.	Awaal	Tula (Bombax ceiba)
	17.	Batna (Cyclobalanopsis oxyodon)	Randy (Albizia saman)
	18.	Pahari raintree (Albizia saman)	Mehedi (Lawsonia inermis)
Booti Jam Tetul (Tamarindus indica)	19.	Booti Jam	Tetul (<i>Tamarindus indica</i>)
Ram Gua (Pinanga gracilis BL) Kantal (Artocarpus heterophyllus)	20.	Ram Gua (Pinanga gracilis BL)	Kantal (Artocarpus heterophyllus)
Lohamori Khalta (<i>Lithocarpus thomsonii</i>) Krishnochura (<i>Delonix regia</i>)	21.	Lohamori Khalta (Lithocarpus thomsonii)	Krishnochura (Delonix regia)
Bhuiya Gachh (<i>Cryptocarya amygdalina</i>) Amra (<i>Spondias pinnata</i>)	22.	Bhuiya Gachh (Cryptocarya amygdalina)	Amra (Spondias pinnata)

various diseases. There is no actual figure how many medicinal plants are used in Bangladesh.

We found some important medicinal plants in the hilly areas of SAU and in hilly areas adjacent to SAU (Table 6). The most common medicinal plants found in those areas were Chanchi (*Alternanthera sessilis*), Malanchashak (*Alternanthera philoxeroides*), Katanotey (*Amaranthus spinosus*), Ashwagondha, Lojjaboti, Anantamul, Satamuli, Sarpagondha, Ghritokumari, Goraneem Khuedjam, Horitoki, Bohera, Dhekishak, Bonjamra, Ada, Amloki, Bel, Mutha, Tulsi, Thankuni, Sylvia etc.

Conclusion

The study was carried out to investigate the status of genetic diversity of plant species in hilly areas and plain lands of Sylhet Agricultural University (SAU) and in hilly areas adjacent to SAU during January, 2015 to June, 2015. The highest number of tree species were are found in hilly areas of M.C. College adjacent to SAU whereas the lowest number of tree species are found in the area of Vicechancellor's bungalow of SAU. Both naturally grown and planted trees, herbs and shrubs along with a good number of medicinal plants were found in the studied areas which created wonderful genetic resources in that region.

Many plant species along with the medicinal plants were identified in the studied areas which may be the good source of genetic material for future study. Therefore, good management practices are needed for conserving these plant genetic resources.

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