

Diversity and Potential Use of Plants at UIN Walisongo Semarang

Niken Kusumarini^{1*}, Baiq Farhatul Wahidah², Arifin Surya Dwipa Irsyam³

^{1,2}Department of Biology, Faculty of Science and Technology, UIN Walisongo Semarang

³Herbarium Bandungense, School of Life Sciences and Technology, Institut Teknologi Bandung

Abstract

Campus of UIN Walisongo Semarang there are several plants planted as shade trees and ornamental plants, although many plants also grow wild in this area. Plant identification is an important step in educating the public about the diversity of plant life and the possibilities that plants offer. Based on this, this study aims to provide information about plant diversity and its potential at UIN Walisongo Semarang. This research was conducted using survey methods, identification, documentation, species validation and literature review. Field observations were carried out at Campuses I, II and III in Ngaliyan Semarang. This study obtained approximately 231 species classified based on wild or cultivated species, habits, and potency. Plants are also widely used as teaching materials in botany courses.

Keywords: diversity; plants; potential; tress; species

Introduction

Because of the wide range of uses that plants have, including in textiles, food, and building materials, plants and human life have a very tight relationship. Plants can be a source of fiber such as bamboo (Munjat & Kasyap, 2015) and cotton (Rahayu & Rustiami, 2017). Food sources for plants can be obtained from carbohydrates such as staple foods (Mutaqin et.al., 2020), as well as vitamins and fiber as found in vegetable and fruit plants (Sholichah & Alfidhdhoh, 2020). Strong wood can be used as building materials and furniture (Dani et.al., 2019). Plants are also used as medicine (Wahidah & Husain, 2020), as well as to beautify the yard (Akbar, 2021; Mahfut et.al., 2021).

The majority of land is covered with vegetation. Indeed, almost every inch of land in Indonesia is covered by plants in the form

of trees, shrubs and herbs due to high rainfall in the tropics. Similarly, there are various flora can be found at the UIN Walisongo Semarang campus region, which is along the north shore of Central Java.

UIN Walisongo Semarang is a campus located in Semarang, Central Java with an area of 304,226 m², including Campus I (20,715 m²), Campus II (100,310 m²), Student Dormitory (9,055 m²) and Campus III (174,146 m²) (Taufiq, 2019). The Student Dormitory is integrated with Campus II. Campuses I, II, and III are located close to each other, even campuses II and III are interconnected campuses.

The campus of UIN Walisongo has a variety of land types, including yards and campus parks, teak and fruit plantations, farms, and unmanaged unoccupied land. The campus of UIN Walisongo is rich in

*Corresponding Author: Niken Kusumarini, Email: kusumarini.niken@walisongo.ac.id, Department of Biology, Faculty of Science and Technology, UIN Walisongo Semarang Indonesia.

biodiversity but has not been inventoried, despite the importance of inventory and identification efforts in documenting a region's plant variety. If humans make the effort to discover them, all known and unknown plants possess enormous potential and benefits. If adequate information on plant variety is gathered, the potential of plants and their effects on human existence may be better understood, which in turn can help the creation of more relevant scientific research. This study aimed to obtain data about the diversity of plants that exist in the UIN Walisongo Semarang Campus area and their potential. This may also directly assist students by making it simpler for them to explore the variety of plant species prevalent on campus, particularly in botany classes.

Research Method

The research was conducted on campuses I, II, and III of UIN Walisongo Semarang in Ngaliyan District, Semarang from January to August 2022. The investigation was undertaken by examining the whole campus as well as perusing the relevant material on plant identification and examinations of its potential and advantages.

Documentation

The collected specimens were then photographed, recorded the scientific name of the species, local name, stature, and ethnicity (Rugayah et al., 2004).

Identification

Specimens were identified using the library Flora of Java vol. 1, 2, and 3 (Backer & Bakhuizen, 1963) and matched with the Plant of The World Online website.

Scientific Name Validatoion

Scientific names were validated using the online database on the Integrated Taxonomic Information System website (<https://www.itis.gov/>).

Result and Discussion

There is a wide variety of flora to be discovered on the grounds of UIN Walisongo Semarang. The plant species identified on campus include approximately 231 species divided into 65 families. The five plant families with the most members are Fabaceae (19 species), Asteraceae (15 species), Euphorbiaceae (11 species), Moraceae (10 species), and Rubiaceae (9 species). The number of species shows that the plants on campus are quite diverse. The plant families and the number of species are presented in Table 1.

Classification of Wild Plants and Cultivated Plants

The plants are classified as cultivated or wild, which refers to plants that are not planted and grow naturally in the UIN Walisongo Campus region. Based on the number of species, the findings of the inventory and identification of cultivated plants are more diversified than those of wild plants.

Cultivated plants consist of shade trees (including fruit trees) as well as shrubs and herbs that function as ornamental plants. (Image 1). There are approximately 150 species of cultivated plants identified in the campus area. Fabaceae (12 species), Asparagaceae (9 species) and Euphorbiaceae (8 species) are the dominant groups of cultivated plants.

The majority of the Fabaceae are shade trees, including trembesi, angkana, sapu tangan tree and pakis brazil, kupu-kupu tree, and flamboyants. The Asparagaceae and Euphorbiaceae family are ornamental plants

with beautiful leaves. Members of the Asparagaceae include mother-in-law's tongue, drasena, andong and pandan bali. Euphorbiaceae includes various cultivars of puring, sambaing darah, zig zag tree, and batavia flower.

Wild plants can be found in all habitats, both in vacant land and garden areas, parks and roadsides (Figure 2). There are 80 species of wild plants identified in the campus area. Asteraceae (12 species), Fabaceae (6 species), and Amaranthaceae (5 species) are the three most abundant families inventoried. Wild plants are dominated by species of shrubs and herbs that cover the land and empty areas in almost the entire campus area.

Plant Classification Based on Its Habit

The plants recorded are presented and grouped in Table 2, Table 3 and Table 4 according to the species of stature of trees, shrubs and herbs. Grouping plants based on stature can facilitate recognition or identification. The grouping of plants based on stature was the first grouping carried out by experts at the beginning of the development of botany (Tjitrosoedirdjo & Chikmawati, 2014).

The majority of tree-bodied plants function as shade which are planted on the side of the road or around campus buildings. Shade trees are very significant on campus since they may minimize light intensity due to Semarang's hot weather. Several tree-like plants produce fruit such as mangoes, semarang wax apple, water guava, guava, mountain apple (*jambu bol*), and soursop. Shade trees that are often found on the roadside of the UIN Walisongo campus include tanjung, trembesi, angsana, pule, kiara payung, glodogan tiang and mahogany (Table 2).

Ornamental shrubs planted on campus consist of beautiful flowering plants such as cempaka, trembelekan, and nusa indah, while beautiful leafy plants include sambang darah, calatea, and andong. Plants with shrubs are often selected as decorative plants since they are simple to care for. Herbs are usually wild plants and are often considered weeds. The existence and habitat of this plant varies depending on the seasons and human intervention related to weed removal.

Potential Use of Plants at UIN Walisongo

Plants in the campus area that have been identified and properly inventoried have enormous potential. When a plant is correctly identified, it receives a scientific name, which has the potential to unlock the doors to a wealth of information on every plant on the earth (Rifai, 1973). Literature searches, both written and online, can describe what various scientific disciplines have been uncovered by humans regarding these plants.

Cultivated plants have clearly known benefits, both as shade trees, ornamental plants and fruit-producing plants. However, the potential that can be uncovered is still not much related to the content of its metabolites. Several species of Fabaceae members are known to have potential as medicinal plants, producing wood, oil, gum, natural dyes, insecticides, (Rachie et al., 1981; Simpson, 2010; Quattrocchi, 2012).

Wild plants have a lot of potential and advantages that have yet to be discovered. In addition to their function as a ground cover, wild plants contain chemicals that are beneficial to people. Members of the Asteraceae family dominate wild plant species and have the potential to be developed as vegetables and medicines. Ajeran and tempuh wiyang which fill almost

every open and poorly maintained area in the campus area, have the potential as vegetable crops. Ajeran has been used in various regions such as in Africa and America (Sanoussi et.al., 2015), as well as tempuh wiyang in Malaysia, Bangladesh and India (Dash et.al., 2015).

Timun padang (Cucurbitaceae) and rambusa (Passifloraceae) are vines and invasive species that can be eaten as fruits and vegetables. Timun Padang has chemical compounds that are efficacious for refreshing, preventing diabetes and lowering blood pressure (Malik et.al., 2018;

Munasinghe et.al., 2011). Rambusa which is a close relative of passion fruit has a fairly high vitamin C content (Karmila & Nuryanti, 2021).

Almost all species of plants have potential as drugs because the majority of plants contain saponins, tannins, flavonoids, xantols, terpenoids, and alkaloids. These substances are antibacterial chemicals often found in plants (Suerni et al., 2013). The use of antimicrobial properties in plants is simply to treat external wounds to avoid bacterial infection.

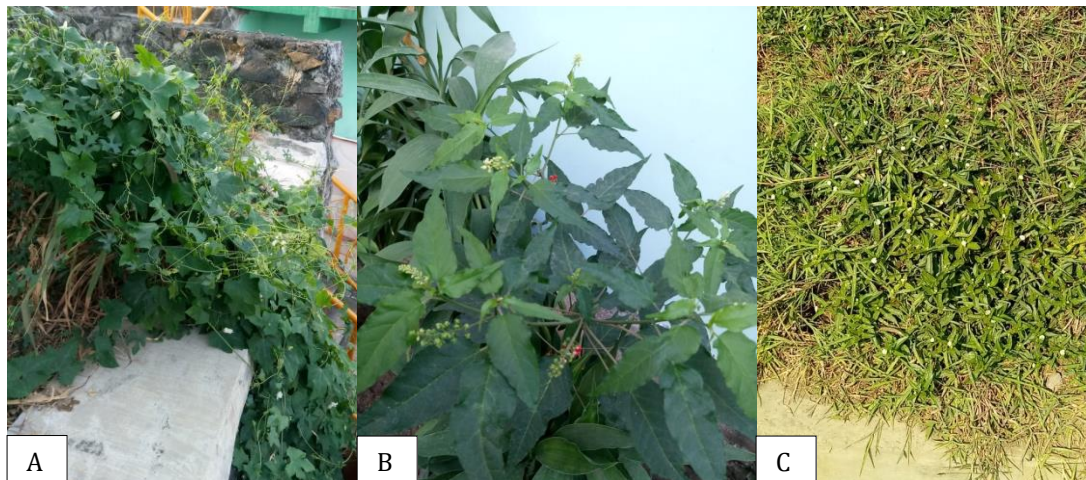
Table 1
Plant Family Found on the Campus of UIN Walisongo Semarang

No	Family	Number of Species	No	Family	Number of Species
1	Acanthaceae	5	34	Loganiaceae	1
2	Amaranthaceae	7	35	Lythraceae	2
3	Amarylidaceae	2	36	Magnoliaceae	1
4	Anacardiaceae	1	37	Malvaceae	5
5	Annonaceae	4	38	Maranthaceae	1
6	Apiaceae	2	39	Melastomataceae	1
7	Apocynaceae	8	40	Meliaceae	2
8	Araceae	5	41	Moraceae	10
9	Araliaceae	3	42	Musaceae	1
10	Areaceae	3	43	Myrtaceae	7
11	Asparagaceae	9	44	Nytaginaceae	2
12	Asteraceae	15	45	Oxalidaceae	4
13	Basellaceae	2	46	Pandanaceae	1
14	Bignoniaceae	3	47	Passifloraceae	2
15	Brassicaceae	1	48	Petiveriaceae	1
16	Bromeliaceae	1	49	Piperaceae	5
17	Cannaceae	1	50	Plantaginaceae	1
18	Caricaceae	1	51	Phyllanthaceae	7
19	Casuarinaceae	1	52	Poaceae	8
20	Cleomaceae	1	53	Portulacaceae	1
21	Combretaceae	2	54	Rhamnaceae	1
22	Commelinaceae	4	55	Rubiaceae	9
23	Convolvulaceae	7	56	Rutaceae	5
24	Costaceae	1	57	Sapindaceae	4
25	Cucurbitaceae	1	58	Sapotaceae	3
26	Cyperaceae	2	59	Scrophulariaceae	1
27	Dioscoreaceae	1	60	Solanaceae	4
28	Elaeocarpaceae	1	61	Urticaceae	1
29	Euphorbiaceae	11	62	Vitaceae	2

No	Family	Number of Species	No	Family	Number of Species
30	Fabaceae	19	63	Verbenaceae	3
31	Heliconiaceae	2	64	Xanthorrhoeaceae	1
32	Iridaceae	1	65	Zingiberaceae	4
33	Lamiaceae	6			

Picture 1

Some Species of Wild Plants Found in UIN Walisongo Semarang Campus: Timun Padang (*Coccinia grandis* L.) (A), Getih-Getihan (*Rivina humilis* L.) (B), Urang Aring (*Eclipta prostrata* (L.) L. (C).



Picture 2

Somespecies of shade trees and ornamental plants planted at UIN Walisongo Semarang Campus: kencana ungu (*Ruellia simplex* C.Wright) (A), beringin dolar (*Ficus microcarpa* L.f. (B), madaia flower (*Thunbergia grandiflora* Roxb.)(C), flamboyant (*Delonix regia* (Bojer ex Hook.) Raf.)(D), purple magnolia (*Magnolia figo* (Lour.) DC).(E).





Table 2
Species of Tree Plants on the Campus of UIN Walisongo Semarang

No.	Family Name	Vernacular Name	Scientific Name
1	Anacardiaceae	Mangga	<i>Mangifera indica</i> L.
2	Annonaceae	Sirsak	<i>Annona muricata</i> L.
3	Annonaceae	Glodogan tiang	<i>Monoon longifolium</i> (Sonn.) B.Xue & R.M.K.Saunders
4	Apocynaceae	Bintaro	<i>Cerbera manghas</i> L.
5	Apocynaceae	Kamboja	<i>Plumeria rubra</i> L.
6	Apocynaceae	Pulai	<i>Alstonia scholaris</i> (L.) R.Br.
7	Araliaceae	Pohon payung	<i>Heptapleurum actinophyllum</i> (Endl.) Lowry & G.M.Plunkett
8	Arecaceae	Palem ekor tupai	<i>Wodyetia bifurcata</i> A.K.Irvine
9	Arecaceae	Palem kuning	<i>Dypsis lutescens</i> (H.Wendl.) Beentje & J.Dransf.
10	Arecaceae	Palem raja	<i>Roystonea regia</i> (Kunth) O.F.Cook
11	Asparagaceae	Sri gading	<i>Dracaena fragrans</i> (L.) Ker Gawl.
12	Bignoniaceae	Tabebuia kuning	<i>Tabebuia aurea</i> (Silva Manso) Benth. & Hook.f. ex S.Moore
13	Bignoniaceae	Tabebuia pink	<i>Tabebuia rosea</i> (Bertol.) Bertero ex A.DC.
14	Bignoniaceae	Crut-crutan	<i>Spathodea campanulata</i> P.Beauv.
15	Caricaceae	Pepaya	<i>Carica papaya</i> L.
16	Casuarinaceae	Cemara Udang	<i>Casuarina equisetifolia</i> L.
17	Combretaceae	Ketapang	<i>Terminalia catappa</i> L.
18	Combretaceae	Ketapang kencana	<i>Terminalia mantaly</i> H.Perrier
19	Elaeocarpaceae	Kersen	<i>Muntingia calabura</i> L.
20	Fabaceae	Asam jawa	<i>Tamarindus indica</i> L.
21	Fabaceae	Sengon	<i>Albizia chinensis</i> (Osbeck) Merr.
22	Fabaceae	Angsana	<i>Pterocarpus indicus</i> Willd.
23	Fabaceae	Bunga kupu-kupu	<i>Bauhinia purpurea</i> L.
24	Fabaceae	Trembesi	<i>Samanea saman</i> (Jacq.) Merr.
25	Fabaceae	Pakis brazil	<i>Schizolobium parahyba</i> (Vell.) S.F.Blake
26	Fabaceae	Akasia	<i>Acacia mangium</i> Willd.
27	Fabaceae	Pohon sapu tangan	<i>Cynometra grandiflora</i> A.Gray
28	Fabaceae	Ketepeng	<i>Senna alata</i> (L.) Roxb.
29	Fabaceae	Flamboyan	<i>Delonix regia</i> (Bojer ex Hook.) Raf.

No.	Family Name	Vernacular Name	Scientific Name
30	Lamiaceae	Jati	<i>Tectona grandis</i> L.f.
31	Lythraceae	Bungur	<i>Lagerstroemia speciosa</i> (L.) Pers.
32	Malvaceae	Durian	<i>Durio zibethinus</i> L.
33	Meliaceae	Mahoni	<i>Swietenia mahagoni</i> (L.) Jacq.
34	Meliaceae	Mimba	<i>Azadirachta indica</i> A.Juss.
35	Moraceae	Karet Kebo	<i>Ficus elastica</i> Roxb. ex Hornem
36	Moraceae	Nangka	<i>Artocarpus integer</i> (Thunb.) Merr.
37	Moraceae	Sukun	<i>Artocarpus altilis</i> (Parkinson) Fosberg
38	Moraceae	Beringin	<i>Ficus benamina</i> L.
39	Moraceae	Ketapang biola	<i>Ficus lyrata</i> Warb.
40	Myrtaceae	Jambu Air	<i>Syzygium aqueum</i> (Burm. f.) Alston
41	Myrtaceae	Jambu bol	<i>Syzygium malaccense</i> (L.) Merr. & L.M.Perry
42	Myrtaceae	Jambu Klutuk	<i>Psidium guajava</i> L.
43	Myrtaceae	Sikat botol	<i>Melaleuca viminalis</i> (Sol. ex Gaertn.) Byrnes
44	Oxalidaceae	Belimbing	<i>Averrhoa carambola</i> L.
45	Oxalidaceae	Belimbing Wuluh	<i>Averrhoa bilimbi</i> L.
46	Rhamnaceae	Jujube	<i>Ziziphus</i> sp.
47	Sapindaceae	Kelengkeng	<i>Dimocarpus longan</i> Lour.
48	Sapindaceae	Rambutan	<i>Nephelium lappaceum</i> L.
49	Sapindaceae	Matoa	<i>Pometia pinnata</i> J.R.Forst. & G.Forst.
50	Sapindaceae	Kiara payung	<i>Filicium decipiens</i> (Wight & Arn.) Thwaites
51	Sapotaceae	Sawo	<i>Manilkara zapota</i> (L.) P. Royen
52	Sapotaceae	Sawo kecil	<i>Manilkara kauki</i> (L.) Dubard
53	Sapotaceae	Tanjung	<i>Mimusops elengi</i> L.

Table 3*Species of shrub plants on the campus of UIN Walisongo Semarang*

No.	Family Name	Vernacular Name	Scientific Name
1	Acanthaceae	Daun ungu	<i>Graptophyllum pictum</i> (L.) Griff.
2	Acanthaceae	Melati jepang	<i>Pseuderanthemum maculatum</i> (G.Lodd.) I.M.Turner
3	Acanthaceae	Bunga madia	<i>Thunbergia grandiflora</i> Roxb.
4	Annonaceae	Srikaya	<i>Annona squamosa</i> L.
5	Annonaceae	Kenanga	<i>Cananga odorata</i> (Lam.) Hook.f. & Thomson
6	Apocynaceae	Kamboja Jepang	<i>Adenium obesum</i> Roem. & Schult.
7	Apocynaceae	Mondokaki	<i>Tabernaemontana divaricata</i> (L.) R.Br. ex Roem. & Schult.
8	Apocynaceae	Biduri	<i>Calotropis gigantea</i> (L.) W.T.Aiton
9	Apocynaceae	Anting putri	<i>Wrightia religiosa</i> (Teijsm. & Binn.) Benth. ex Kurz
10	Apocynaceae	Alamanda	<i>Allamanda cathartica</i> L.
11	Araliaceae	Walisongo	<i>Heptapleurum arboricola</i> Hayata
12	Araliaceae	Mangkokan	<i>Polyscias scutellaria</i> (Burm.f.) Fosberg
13	Asteraceae	Daun afrika	<i>Gymnanthemum amygdalinum</i> (Delile) Sch.Bip.
14	Asteraceae	Kirinyuh	<i>Chromolaena odorata</i> (L.) R.M.King & H.Rob.

No.	Family Name	Vernacular Name	Scientific Name
15	Asteraceae	Janda merana	<i>Tarlmounia elliptica</i> (DC.) H.Rob., S.C.Keeley, Skvarla & R.Chan
16	Asparagaceae	Suji	<i>Dracaena angustifolia</i> (Medik.) Roxb.
17	Asparagaceae	Pandan bali	<i>Cordyline australis</i> (G.Forst.) Endl.
18	Asparagaceae	Bambu jepang	<i>Dracaena surculosa</i> Lindl.
19	Asparagaceae	Drasena tricolor	<i>Dracaena reflexa</i> var. <i>angustifolia</i> Baker
20	Euphorbiaceae	Jarak	<i>Ricinus communis</i> L.
21	Euphorbiaceae	Singkong	<i>Manihot esculenta</i> Crantz
22	Euphorbiaceae	Bunga Kancing	<i>Euphorbia milii</i> Des Moul.
23	Euphorbiaceae	Puring	<i>Codiaeum variegatum</i> (L.) Rumph. ex A.Juss.
24	Euphorbiaceae	Pohon zig zag	<i>Euphorbia tithymaloides</i> L.
25	Euphorbiaceae	Bunga Batavia	<i>Jatropha integerrima</i> Jacq.
26	Euphorbiaceae	Sambang darah	<i>Excoecaria cochinchinensis</i> Lour.
27	Euphorbiaceae	Teh-tehan	<i>Acalypha kerrii</i> Craib
28	Fabaceae	Lamtoro	<i>Leucaena leucocephala</i> L.
29	Fabaceae	Puteri malu	<i>Mimosa pudica</i> L.
30	Fabaceae	Ki kerbau	<i>Mimosa pigra</i> L.
31	Lythraceae	Bungur kecil	<i>Lagerstroemia indica</i> L.
32	Lythraceae	Bunga taiwan	<i>Cuphea hyssopifolia</i> Kunth
33	Magnoliaceae	Cempaka ungu	<i>Magnolia figo</i> (Lour.) DC.
34	Malvaceae	Kembang sepatu	<i>Hibiscus rosa-sinensis</i> L.
35	Malvaceae	Sentolo	<i>Abroma augustum</i> (L.) L.f.
36	Malvaceae	Pulutan	<i>Urena lobata</i> L.
37	Melastomataceae	Parijoto	<i>Medinilla speciosa</i> Blume
38	Moraceae	Awar-awar	<i>Ficus septica</i> Burm f.
39	Moraceae	Beringin dolar	<i>Ficus microcarpa</i> L.f.
40	Moraceae	Uyah-uyahan	<i>Ficus montana</i> Burm.f.
41	Moraceae	Dolar rambat	<i>Ficus pumila</i> L.
42	Moraceae	ilat-ilat	<i>Ficus callosa</i> Willd.
43	Myrtaceae	Pucuk Merah	<i>Syzygium myrtifolium</i> Walp.
44	Myrtaceae	Dewandaru	<i>Eugenia uniflora</i> L.
45	Myrtaceae	Salam	<i>Syzygium polyanthum</i> (Wight) Walp.
46	Nyctaginaceae	Bunga kertas	<i>Bougainvillea</i> sp.
47	Passifloraceae	Rambusa	<i>Passiflora foetida</i> L.
48	Phyllanthaceae	Mangsi	<i>Phyllanthus reticulatus</i> Poir.
49	Phyllanthaceae	Cenderawasih	<i>Phyllanthus myrtifolius</i> (Wight) Müll.Arg.
50	Piperaceae	Sirih Hijau	<i>Piper betle</i> L.
51	Piperaceae	Sirih merah	<i>Piper ornatum</i> N.E. Br.
52	Piperaceae	Cabe jawa	<i>Piper retrofractum</i> Vahl
53	Piperaceae	Sirih hutan	<i>Piper aduncum</i> L.
54	Poaceae	Bambu jepang	<i>Pseudosasa japonica</i> (Siebold & Zucc. ex Steud.) Makino ex Nakai
55	Rubiaceae	Kaca piring	<i>Gardenia jasminoides</i> J.Ellis
56	Rubiaceae	Soka jawa	<i>Ixora javanica</i> (Blume) DC.
57	Rubiaceae	Nusa indah putih	<i>Mussaenda pubescens</i> Dryand.

No.	Family Name	Vernacular Name	Scientific Name
58	Rubiaceae	Nusa indah merah	<i>Mussaenda erythrophylla</i> Schumach. & Thonn.
59	Rubiaceae	Pentas	<i>Pentas lanceolata</i> (Forssk.) Deflers
60	Rutaceae	Jeruk	<i>Citrus</i> sp.
61	Rutaceae	Jeruk lemon	<i>Citrus limon</i> (L.) Osbeck
62	Rutaceae	Zodia	<i>Euodia hortensis</i> J.R.Forst. & G.Forst.
63	Rutaceae	Daun kari	<i>Bergera koenigii</i> L.
64	Rutaceae	Kemuning	<i>Murraya paniculata</i> (L.) Jack
65	Scrophulariaceae	Bunga air mancur	<i>Russelia equisetiformis</i> Schlttdl. & Cham.
66	Solanaceae	Takokak	<i>Solanum torvum</i> Sw.
67	Solanaceae	Terong-terongan	<i>Solanum diphyllum</i> L.
68	Verbenaceae	Trembelekan kuning	<i>Lantana camara</i> L.
69	Verbenaceae	Trembelekan ungu	<i>Lantana trifolia</i> L.
70	Verbenaceae	Sinyo nakal	<i>Duranta erecta</i> L.

Table 4

Species of herb plants on the campus of UIN Walisongo Semarang

No.	Family Name	Vernacular Name	Scientific Name
1	Acanthaceae	Pletekan	<i>Ruellia tuberosa</i> L.
2	Acanthaceae	Kencana ungu	<i>Ruellia simplex</i> C.Wright
3	Amaranthaceae	Bayam duri	<i>Amaranthus spinosus</i> L.
4	Amaranthaceae	Bayam ramping	<i>Amaranthus viridis</i> L.
5	Amaranthaceae	Jawer Kotok	<i>Celosia argentea</i> L.
6	Amaranthaceae	Daun erpa	<i>Ouret sanguinolenta</i> (L.) Kuntze
7	Amaranthaceae	Kremah air	<i>Alternanthera philoxeroides</i> (Mart.) Griseb.
8	Amaranthaceae	Kaliko	<i>Alternanthera bettzickiana</i> (Regel) G.Nicholson
9	Amaranthaceae	Bunga kancing	<i>Gomphrena serrata</i> L.
10	Amaryllidaceae	Bunga desember	<i>Scadoxus multiflorus</i> (Martyn) Raf.
11	Amaryllidaceae	Lili hujan	<i>Zephyranthes minuta</i> (Kunth) D.Dietr.
12	Apiaceae	Pegagan	<i>Centella asiatica</i> (L.) Urb.
13	Apiaceae	Pegagan air	<i>Hydrocotyle vulgaris</i> L.
14	Araceae	Keladi tikus	<i>Thyponium flagelliformis</i> L.
15	Araceae	Keladi hias	<i>Caladium bicolor</i> (Aiton) Vent.
16	Araceae	Sirih gading	<i>Epipremnum aureum</i> (Linden & André) G.S.Bunting
17	Araceae	Sri rejeki	<i>Aglaonema</i> sp.
18	Araceae	Daun bahagia	<i>Dieffenbachia</i> sp.
19	Asteraceae	Ajeran	<i>Bidens pilosa</i> L.
20	Asteraceae	Sawi Langit	<i>Cyanthillium cinereum</i> (L.) H.Rob.
21	Asteraceae	Bandotan	<i>Ageratum conyzoides</i> L.
22	Asteraceae	Kenikir	<i>Cosmos caudatus</i> Kunth.
23	Asteraceae	Urang aring	<i>Eclipta prostrata</i> (L.) L.
24	Asteraceae	Gletang	<i>Tridax procumbens</i> L.
25	Asteraceae	Tempuh wiyang	<i>Emilia sonchifolia</i> (L.) DC.
26	Asteraceae	Sintrong	<i>Crassocephalum crepidioides</i> (Benth.) S.Moore

No.	Family Name	Vernacular Name	Scientific Name
27	Asteraceae	Jotang kuda	<i>Synedrella nodiflora</i> (L.) Gaertn.
28	Asteraceae	Ogiera	<i>Eleutheranthera ruderalis</i> (Sw.) Sch.Bip.
29	Asteraceae	Tapak liman	<i>Elephantopus scaber</i> L.
30	Asteraceae	Jelantir	<i>Erigeron sumatrensis</i> Retz.
31	Asparagaceae	Lidah Mertua	<i>Dracaena trifasciata</i> (Prain) Mabb.
32	Asparagaceae	Andong	<i>Cordyline fruticosa</i> (L.) A.Chev.
33	Asparagaceae	Agave	<i>Agave americana</i> L.
34	Asparagaceae	Lili paris	<i>Chlorophytum comosum</i> (Thunb.) Jacques
35	Basellaceae	Binahong	<i>Anredera cordifolia</i> (Ten.) Steenis
36	Basellaceae	Gendola	<i>Bassela alba</i> L.
37	Brassicaceae	Sawi tanah	<i>Rorippa indica</i> (L.) Hiern
38	Bromeliaceae	Bromelia	<i>Bromelia</i> sp.
39	Cannaceae	Ganyong	<i>Canna</i> sp.
40	Cleomaceae	Maman ungu	<i>Cleome rutidospermae</i> DC.
41	Commelinaceae	Adam Hawa	<i>Tradescantia spathacea</i> Sw.
42	Commelinaceae	Gewor	<i>Commelina benghalensis</i> L.
43	Commelinaceae	Petungan	<i>Cyanotis cristata</i> (L.) D.Don
44	Commelinaceae	Adam hawa ungu	<i>Tradescantia pallida</i> (Rose) D.R.Hunt
45	Convolvulaceae	Ketela rambat	<i>Ipomoea batatas</i> (L.) Lam.
46	Convolvulaceae	Evolvulus	<i>Evolvulus nummularius</i> (L.) L.
47	Convolvulaceae	Meremia	<i>Merremia emarginata</i> (Burm.f.) Hallier f.
48	Convolvulaceae	Ki papasan	<i>Ipomoea obscura</i> (L.) Ker Gawl.
49	Convolvulaceae	Ubi jalar	<i>Ipomoea triloba</i> L.
50	Convolvulaceae	Morning glory	<i>Ipomoea heredifolia</i> L.
51	Convolvulaceae	Areuy bulu	<i>Lepistemon binectarifer</i> (Wall.) Kuntze
52	Costaceae	Pacing	<i>Hellenia speciosa</i> (J.Koenig) S.R.Dutta
53	Cucurbitaceae	Timun padang	<i>Coccinia grandis</i> L.
54	Cyperaceae	Rumput pendul	<i>Cyperus brevifolius</i> (Rottb.) Hassk.
55	Cyperaceae	Rumput teki	<i>Cyperus rotundus</i> L.
56	Dioscoreaceae	Uwi	<i>Dioscorea alata</i> L.
57	Euphorbiaceae	Patikan kebo	<i>Euphorbia hirta</i> L.
58	Euphorbiaceae	Patikan cina	<i>Euphorbia thymifolia</i> L.
59	Euphorbiaceae	Anting-anting	<i>Acalypha indica</i> L.
60	Fabaceae	Kacang fase	<i>Macroptilium lathyroides</i> (L.) Urb.
61	Fabaceae	Rumput israel	<i>Grona triflora</i> (L.) H.Ohashi & K.Ohashi
62	Fabaceae	Kacang hias	<i>Arachis pintoi</i> Krapov. & W.C.Greg.
63	Fabaceae	Kacang kalopo	<i>Calopogonium mucunoides</i> Desv.
64	Fabaceae	Sentro	<i>Centrosema pubescens</i> Benth.
65	Fabaceae	Grona	<i>Grona triflora</i> (L.) H.Ohashi & K.Ohashi
66	Heliconiaceae	Pisang hias	<i>Heliconia rostrata</i> Ruiz. & Pav.
67	Heliconiaceae	Pisang hias	<i>Heliconia psittacorum</i> L.f.
68	Iridaceae	Iris kuning	<i>Trimezia longifolia</i> (Link & Otto) Christenh. & Byng
69	Lamiaceae	Iler	<i>Coleus scutellarioides</i> (L.) Benth.
70	Lamiaceae	Lavender	<i>Lavandula angustifolia</i> Mill.
71	Lamiaceae	Nona makan sirih	<i>Clerodendrum thomsoniae</i> Balf.f.

No.	Family Name	Vernacular Name	Scientific Name
72	Lamiaceae	Iler liar	<i>Coleus monostachyus</i> (P.Beauv.) A.J.Paton
73	Loganiaceae	Spigelia	<i>Spigelia anthelmia</i> L.
74	Malvaceae	Sidaguri	<i>Sida rhombifolia</i> L.
75	Maranthaceae	Calathea	<i>Calathea lutea</i> (Aubl.) E.Mey. ex Schult.
76	Musaceae	Pisang	<i>Musa x paradisiaca</i> L.
77	Nyctaginaceae	Bunga Pukul Empat	<i>Mirabilis japala</i> L.
78	Oxalidaceae	Semanggi gunung	<i>Oxalis corniculata</i> L.
79	Oxalidaceae	Calincing tanah	<i>Oxalis barrelieri</i> L.
80	Pandanaceae	Pandan	<i>Pandanus amaryllifolius</i> Roxb.
81	Petiveriaceae	Getih-getihan	<i>Rivina humilis</i> L.
82	Phyllanthaceae	Meniran hijau	<i>Phyllanthus niruri</i> L.
83	Phyllanthaceae	Meniran merah	<i>Phyllanthus urinaria</i> L.
84	Phyllanthaceae	Meniran maskarena	<i>Phyllanthus tenellus</i> Roxb.
85	Piperaceae	Sirih cina	<i>Peperomia pellucida</i> (L.) Kunth
86	Plantaginaceae	Jaka tua	<i>Scoparia dulcis</i> L.
87	Poaceae	Rumput manila	<i>Zoysia matrella</i> (L.) Merr.
88	Poaceae	Rumput belulang	<i>Eleusine indica</i> (L.) Gaertn.
89	Poaceae	Alang-alang	<i>Imperata cylindrical</i> (L.) Raeusch.
90	Poaceae	Alang-alang merah	<i>Cenchrus setaceus</i> (Forssk.) Morrone
91	Poaceae	Paitan	<i>Axonopus compressus</i> (Sw.) P.Beauv.
92	Poaceae	Emprit-emprit	<i>Eragrostis tenella</i> (L.) P.Beauv. ex Roem. & Schult.
93	Poaceae	Tebu	<i>Saccharum officinarum</i> L.
94	Portulacaceae	Krokot	<i>Portulaca oleracea</i> L.
95	Rubiaceae	Sembukan	<i>Paederia foetida</i> L.
96	Rubiaceae	Rumput siku-siku	<i>Oldenlandia corymbosa</i> L.
97	Rubiaceae	Rumput setawar	<i>Spermacoce alata</i> Aubl.
98	Rubiaceae	Bulu lutung	<i>Spermacoce tenuior</i> L.
99	Solanaceae	Ciplukan	<i>Physalis angulata</i> L.
100	Solanaceae	Cabai rawit	<i>Capsicum frutescens</i> L.
101	Urticaceae	Katumpangan	<i>Pilea microphylla</i> (L.) Liebm.
102	Vitaceae	Galing-galing	<i>Causonis trifolia</i> (L.) Mabb. & J.Wen
103	Vitaceae	Curtain ivy	<i>Cissus verticillata</i> (L.) Nicolson & C.E.Jarvis
104	Xanthorrhoeaceae	Lidah Buaya	<i>Aloe vera</i> (L.) Burm. f.
105	Zingiberaceae	Lempuyang	<i>Zingiber aromaticum</i> Val
106	Zingiberaceae	Lengkuas	<i>Alpinia galangal</i> (L.) Wild.
107	Zingiberaceae	Jahe	<i>Zingiber officinale</i> Roscoe
108	Zingiberaceae	Kunyit	<i>Curcuma longa</i> L.

The variety of plant families found along with the types of stature, morphological characters and their potential can support learning and research related to the field of botany. Plants and their various morphological characters can be used as material for studying phytography. The anatomical structure of parts of plant organs can be used as anatomical preparations (Khasanah & Kusumarini, 2021). Groups of plants such as Annonaceae, Piperaceae, Zingiberaceae, and Fabaceae are sufficiently complete to be used as material for studying plant systematics.

The diversity of plants in the UIN Walisongo Semarang Campus area is expected to always be dynamic both in terms of the number of species and their population. This is due to the fact that campus improvement projects, such as new building construction, renovations, and alterations to the physical layout, are continuously being worked on over the years. This can cause an increase or decrease in plant species at UIN Walisongo.

The existence of plants found in the UIN Walisongo Semarang campus area can support the concept of backyard conservation (Silalahi & Mustaqim 2021). The attention and recognition by campus residents will directly improve the care of plants on campus. Planting yard plants can facilitate conservation efforts. Specifically, different kinds of trees planted give benefits to campus residents, such as fruits, shrubs, and herbs that may even be planted in a small space. The habitat of these plants can also be reached easily so that maintenance can be carried out optimally.

Conclusion

The plants identified in the UIN Walisongo Campus area are approximately 231 species. Plants consisting of wild and cultivated, stature in the form of trees, shrubs, and herbs. Plants on campus have various potentials for human life, and can be used as learning materials for botany.

References

Akbar A. 2021. Penggunaan dan Nilai Ekonomi dari Tanaman *Aglaonema* sp. di Kalangan

Pedagang Tanaman Hias Sekitar Cengkareng dan Pulo Gadung. *Jurnal Bios Logos* 11(2)Agustus 2021: 122-128.

Backer CA & Bakhuizen van den Brink RC. 1963. *Flora of Java*. Volume ke-1,2,3. Groningen (NL): NVP Noordhoff.

Dani BYD, Wahidah BF, Syaifudin A. 2019. Etnobotani Tanaman Kelor (*Moringa oleifera* Lam.) di Desa Kedungbulus Gembong Pati. *Al-Hayat: Journal of Biology and Applied Biology* 2(2), 44-52.

Dash GK, Abdullah MS, Yahaya R. 2015. Traditional uses, phytochemical and pharmacological aspects of *Emilia sonchifolia* (L.) DC. *International Journal of Research in Ayurveda and Pharmacy* 6(4):551-556.

Karmila K, Nuryanti S. 2021. Analysis of Vitamin C in Rambusa Fruit (*Passiflora foetida* L.). *Media Eksakta* 17(1):46-51.

Khasanah RAN, Kusumarini N. 2021. The Morphological and Anatomical Studies of The Aerial Parts of *Abroma augusta* L. from Semarang. *Biodjati* 6(2): 222-234.

Malik K, Ahmad M, Bussmann RW, Tariq A, Ullah R, Alqahtani AS, Shahat AA, Rashid N, Zafar M, Sultana S, Shah SN. 2018. Ethnobotany of Anti-hypertensive Plants Used in Northern Pakistan. *Frontiers in Pharmacology* 9(Juli 2018):789.

Mahfut, Handayani TT, Wahyuningsih S, Sukimin. 2021. Identification of *Dendrobium* (Orchidaceae) in Liwa Botanical Garden Based on Leaf Morphological Characters. *Journal of Tropical Biodiversity and Biotechnology*. 6(1): 1-6.

Munasinghe MAAK, Abeysena C, Yaddhige IS, Vidanapathirana T, Piyumal KPB. 2011. Blood Sugar Lowering Effect of *Coccinia grandis* (L.) J. Voigt: Path for a New Drug for Diabetes Mellitus. *Experimental Diabetes Research* (2011):1-4.

Munjal K, Kashyap R. 2015. Bamboo Fiber: An Approach toward Sustainable Development. *International Journal of Science and Research (IJSR)* 4(4): 1080-1083.

Mutaqin AZ, Kurniadie D, Iskandar J, Nurzaman

- M, Partasasmita R. 2020. Ethnobotany of suweg, *Amorphophallus paeoniifolius*: Utilization and cultivation in West Java, Indonesia. *Biodiversitas Journal of Biological Diversity* 21(4) March 2020: 546-555.
- Quattrocchi U. 2012. *CRC world dictionary of medicinal and poisonous plants: common names, scientific names, eponyms, synonyms, and etymology* (Five Volume Set). New York: CRC Press.
- Rachie KO. 1981. *Tropical legumes: resources for the future*. Washington D.C.: National Academy of Science.
- Rahayu M, Rustiami H. 2017. Etnobotani Masyarakat Samawa Pulau Sumbawa. *Scripta Biologica* 4 (4): 235–245.
- Rifai MA. 1973. *Kode Internasional Tatanama Tumbuh-Tumbuhan*. Bogor: Herbarium Bogoriense LIPI.
- Rugayah, Widjaja EA, Praptiwi. 2004. *Pedoman Pengumpulan Data Keanekaragaman Flora*. Bogor: Pusat Penelitian Biologi LIPI.
- Sanoussi F, Ahissou H, Dansi M, Hounkonnou B, Agre AP, Dansi A. 2015. Ethnobotanical investigation of three traditional leafy vegetables [*Alternanthera sessilis* (L.) DC. *Bidens pilosa* L. *Launaea taraxacifolia* Willd.] widely consumed in southern and central Benin. *Journal of Biodiversity and Environmental Sciences* 6(2):187-198.
- Sholichah L, Alfidhdhoh D. 2020. Etnobotani Tumbuhan Liar sebagai Sumber Pangan di Dusun Mendiro, Kecamatan Wonosalam, Jombang. *Jurnal Ilmu Pertanian Indonesia (JIPI)*, Januari 2020: 111-117.
- Simpson, M G. (2010). *Plant systematics*. California: Elsevier Academic Press.
- Suerni Endang, Alwi Muhammad and Guli Musjaya M. 2013. Uji Daya Hambat Ekstrak Buah Nanas (*Ananas comosus* L. Merr.), Salak (*Salacca edulis* Reinw.) dan Mangga Kweni (*Mangifera odorata* Griff.) terhadap Daya Hambat *Staphylococcus aureus*. *Biocelebes* 7(1):35-47.
- Taufiq I. 2020. Laporan Rektor Tahun 2019. Hlm 1-100.
- Tjitrosoedirdjo SS, Chikmawati T. 2014. *Sejarah Klasifikasi dan Perkembangan Taksonomi Tumbuhan dalam Modul 1 Taksonomi Tumbuhan Tinggi*. Universitas Terbuka: Jakarta.
- Wahidah BF, Husain F. 2018. Etnobotani Tumbuhan Obat Yang Dimanfaatkan Oleh Masyarakat Desa Samata Kecamatan Somba Opu Kabupaten Gowa Sulawesi Selatan. *Life Science. Journal of Biology* 7(2):56-65.

