

인도네시아 보고르와 반둥 지역의 약용식물 조사 연구

박종철 교수

국립순천대학교 생명산업과학대학 한약자원개발학과 및 순천대 한의약연구소

Study on Medicinal Plants of 3 Botanical Gardens in Bogor and Bandung of Indonesia

Park, Jong Cheol

Department of Oriental Medicine Resources and Research Institute of Korean Oriental Medicine,
Suncheon National University

Abstract

From the Botanic Garden of Bogor Agricultural University, Medicinal Plant Garden of Bandung Institute of Technology and Medicinal Plant Garden of Bumi Herbal Dago in Indonesia, 227 medicinal plants were examined by photographing. From the Botanic Garden of Bogor Agricultural University, 108 species in 46 families of plants were investigated. Among this botanic garden, the most dominant family was Compositae with 11 species, followed by Zingiberaceae with 9 species and Acanthaceae with 8 species. From Medicinal Plant Garden of Bandung Institute of Technology in Bandung, 43 species in 26 families of plants were studied. The most dominant family in this botanic garden was Acanthaceae with 6 species, followed by Lamiaceae with 5 species and Euphorbiaceae with 4 species. From the Medicinal Plant Garden of Bumi Herbal Dago in Bandung, 76 species in 33 families of medicinal plants were classified. Among this botanic garden, the most dominant family was Lamiaceae with 10 species, followed by Acanthaceae with 7 species and Compositae with 6 species.

Keywords: Indonesia, Medicinal Plant, Botanic Garden of Bogor Agricultural University, Medicinal Plant Garden of Bandung Institute of Technology, Medicinal Plant Garden of Bumi Herbal Dago

Correspondence: Park, Jong Cheol

Dept. of Oriental Medicine Resources and Research Institute of Korean Oriental Medicine, Suncheon National Univ.,
255 Jungang-ro, Suncheon, Jeonnam 57922 Republic of Korea

E-mail: flavonoid@empas.com

Received 2018-09-05, revised 2018-09-30, accepted 2018-09-30, available online 2018-10-02
doi:10.22674/KHMI-6-2-3



서론

인도네시아의 보고르(Bogor) 시와 반둥(Bandung) 시에 있는 식물원 3 곳을 찾아 이곳의 약용식물을 사진 촬영을 통해 조사했다. 보고르는 인도네시아 수도인 자카르타에서 남쪽으로 60km 떨어진 곳에 있다. 해발 고도 265m의 완만한 고지대에 위치하고 있어 날씨는 조금 서늘한 편이며 연중 강수량이 많다¹⁾. 보고르농대(Bogor Agricultural University, Institut Pertanian Bogor)는 보고르 시내에 위치해 있으며 1963년에 설립되어 농학부, 수의학부, 동물과학부, 임학부, 농기계기술학부 등의 학부로 이루어져 있다²⁾. 대학 캠퍼스 내에 식물원이 있다. 반둥은 자바섬 자바바라트주(州)의 주도(州都)로 인도네시아에서 3번째로 큰 도시이며, 자카르타에서 남동쪽으로 170km 떨어진 곳에 있다. 이 지역은 제 3세계 비동맹 운동을 상징하는 반둥회의의 개최지로 유명한 곳이다. 반둥회의는 식민지주의의 종식을 가속화하고 미·소 간의 냉전에서 중립을 지키기 위해 아시아와 아프리카 국가들 사이에 긴밀한 유대 관계를 형성하기 위한 목적으로 개최된 회의다³⁾. 반둥 시내에 있는 반둥공대(Bandung Institute of Technology, Institut Teknologi Bandung)는 ITB로 잘 알려져 있으며 1920년에 개교하여 인도네시아 내에서는 가장 오래된 공대로 알려져 있다⁴⁾. 약학부에 부속 약용식물원이 있다. 약초회사인 Bumi Herbal Dago의 약용식물원은 반둥 시내에서 북동쪽에 위치해 있으며 산 비탈에 식물원을 조성해 놓았다⁵⁾. 보고르농대 식물원, 반둥공대 약용식물원과 Bumi Herbal Dago 약용식물원에서 227종의 식물을 촬영한 후 이들 학명을 알파벳 순과 과명 순으로 분석했다. 촬영한 식물 사진은 증거사진으로서 저자의 연구실에 보관 중이다.

본론

1) 조사방법

저자가 방문 조사한 인도네시아의 보고르농대 식물원, 반둥공대 약용식물원 및 Bumi Herbal Dago 약용식물원의 정보는 Table 1과 같다. 본 논문에 기재한 식물은 식물원의 팻말에 있는 학명을 기본으로 하여 the Plant List⁶⁾, the International Plant Names Index⁷⁾, 국가생물종지식정보⁸⁾를 통해 이들 학명을 확인했다. 식물원 팻말에서 학명이 이명으로 표기된 것은 본문에 함께 기록해 뒀다.

Table 1. Information on 3 botanical gardens in Bogor and Bandung of Indonesia

Botanical Garden Name	Botanic Garden of Bogor Agricultural University
Location	Jl. Raya Dramaga, Kampus IPB Dramaga Bogor 16680 West Java, Indonesia
Created	1963(as Bogor Agricultural University)
Website	https://ipb.ac.id
Botanical Garden Name	Medicinal Plant Garden of Bandung Institute of Technology
Location	Jl. Ganesha 10, Bandung, Indonesia
Created	1959(as Bandung Institute of Technology)
Website	www.itb.ac.id
Botanical Garden Name	Medicinal Plant Garden of Bumi Herbal Dago
Location	Jalan Cimenyan, Cimenyan, Bandung, Jawa Barat 40197, Indonesia
Website	http://bumiherbal.com



2) 결과 및 고찰

인도네시아 보고르 및 반둥지역의 3개 식물원에서 227종의 약용식물을 사진촬영하여 그 학명을 정리·분석했다. 즉 보고르농대 식물원, 반둥공대 약용식물원 및 Bumi Herbal Dago 약용식물원에서 각 108종, 43종, 76종의 약용식물을 조사했다.

보고르농대 식물원에서 46과 108종의 식물을 조사했다(Fig. 1). 이 식물들을 과(科)별로 분석하면 국화과(Asteraceae, Compositae) 11종, 생강과(Zingiberaceae) 9종, 쥐꼬리망초과(Acanthaceae) 8종, 대극과(Euphorbiaceae), 꿀풀과(Lamiaceae, Labiatae)의 각 6종, 콩과(Fabaceae, Leguminosae) 5종, 협죽도과(Apocynaceae), 아스파라거스과(Asparagaceae), 아욱과(Malvaceae), 운향과(Rutaceae)의 각 4종이다. 가장 많이 있는 국화과(Asteraceae, Compositae) 식물은 *Artemisia vulgaris* L., *Ayapana triplinervis* (Vahl) R.M.King & H.Rob., *Cosmos caudatus* Kunth, *Elephantopus scaber* L., *Gynura japonica* (Thunb.) Juel, *Gynura procumbens* (Lour.) Merr., *Pluchea indica* (L.) Less., *Solidago canadensis* L., *Stevia rebaudiana* (Bertoni) Bertoni, *Tagetes erecta* L., *Vernonia amygdalina* Delile 이다. 이 식물원의 조사 식물을 속별로 분류하면 *Curcuma* 속(屬)은 *Curcuma aeruginosa* Roxb., *Curcuma zanthorrhiza* Roxb., *Curcuma zedoaria* (Christm.) Roscoe 의 3종이 자라고 있으며, *Barleria*, 누리장나무속(*Clerodendron*), 대극속(*Euphorbia*), *Gynura*, *Murraya*, *Plectranthus*, *Talinum*, 생강속(*Zingiber*) 식물은 각 2종씩 분포하고 있다(Table 2).



Fig.1. Some medicinal plants of Botanic Garden of Bogor Agricultural University in Indonesia

- ① *Artocarpus integer* (Thunb.) Merr., ② *Brucea javanica* (L.) Merr., ③ *Brunfelsia uniflora* (Pohl) D. Don, ④ *Evodia hortensis* J.R. Forst. & G. Forst. (= *Evodia suaveolens* Scheff.), ⑤ *Ficus deltoidea* Jack, ⑥ *Ixora chinensis* Lam. (= *Ixora stricta* Roxb.)

Table 2. The plant list of Botanic Garden of Bogor Agricultural University in Indonesia

Family name	Scientific name	Synonym written on the name tag in the botanical garden
Acanthaceae	<i>Acanthus ilicifolius</i> L.	
	<i>Andrographis paniculata</i> (Burm.f.) Nees	
	<i>Barleria lupulina</i> Lindl.	
	<i>Barleria prionitis</i> L.	
	<i>Clinacanthus nutans</i> (Burm.f.) Lindau	
	<i>Graptophyllum pictum</i> (L.) Griff.	
	<i>Justicia gendarussa</i> Burm.f.	
	<i>Strobilanthes laevigata</i> C.B.Clarke	
Amaranthaceae	<i>Aerva sanguinolenta</i> (L.) Blume	
Amaryllidaceae	<i>Zephyranthes candida</i> (Lindl.) Herb.	
Anacardiaceae	<i>Mangifera caesia</i> Jack	
Annonaceae	<i>Annona muricata</i> L.	
	<i>Cananga odorata</i> (Lam.) Hook.f. & Thomson	<i>Canangium odoratum</i> (Lam.) Baill. ex King
Apocynaceae	<i>Allamanda cathartica</i> L.	
	<i>Cascabela thevetia</i> (L.) Lippold	<i>Thevetia peruviana</i> (Pers.) K.Schum.
	<i>Catharanthus roseus</i> (L.) G.Don	<i>Vinca rosea</i> L.
	<i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz	
Araliaceae	<i>Polyscias scutellaria</i> (Burm.f.) Fosberg	
Asparagaceae	<i>Cordyline fruticosa</i> (L.) A.Chev.	
	<i>Dracaena angustifolia</i> (Medik.) Roxb.	<i>Pleomele angustifolia</i> (Medik.) N.E.Br.
	<i>Polianthes tuberosa</i> L.	
	<i>Sansevieria trifasciata</i> Prain	
Clusiaceae	<i>Garcinia dulcis</i> (Roxb.) Kurz	
Combretaceae	<i>Quisqualis indica</i> L.	
Commelinaceae	<i>Tradescantia spathacea</i> Sw.	<i>Rhoeo spathacea</i> (Sw.) Stearn
Compositae	<i>Artemisia vulgaris</i> L.	
	<i>Ayapana triplinervis</i> (Vahl) R.M.King & H.Rob.	<i>Eupatorium triplinerve</i> Vahl
	<i>Cosmos caudatus</i> Kunth	
	<i>Elephantopus scaber</i> L.	
	<i>Gynura japonica</i> (Thunb.) Juel	<i>Gynura segetum</i> (Lour.) Merr.
	<i>Gynura procumbens</i> (Lour.) Merr.	
	<i>Pluchea indica</i> (L.) Less.	
	<i>Solidago canadensis</i> L.	
	<i>Stevia rebaudiana</i> (Bertoni) Bertoni	
	<i>Tagetes erecta</i> L.	
<i>Vernonia amygdalina</i> Delile		



Costaceae	<i>Cheilocostus speciosus</i> (J.Koenig) C.D.Specht	<i>Costus speciosus</i> (J.Koenig) Sm.
Crassulaceae	<i>Bryophyllum pinnatum</i> (Lam.) Oken	<i>Kalanchoe pinnata</i> (Lam.) Pers.
Elaeocarpaceae	<i>Elaeocarpus grandiflorus</i> Sm.	
Euphorbiaceae	<i>Codiaeum variegatum</i> (L.) Rumph. ex A.Juss.	
	<i>Croton tiglium</i> L.	
	<i>Euphorbia tirucalli</i> L.	
	<i>Euphorbia tithymaloides</i> L.	<i>Pedilanthus tithymaloides</i> (L.) Poit.
	<i>Excoecaria cochinchinensis</i> Lour.	<i>Excoecaria bicolor</i> (Hassk.) Zoll. ex Hassk.
Iridaceae	<i>Jatropha multifida</i> L.	
	<i>Eleutherine bulbosa</i> (Mill.) Urb.	<i>Eleutherine americana</i> (Aubl.) Merr. ex K.Heyne
Lamiaceae	<i>Iris domestica</i> (L.) Goldblatt & Mabb.	<i>Belamcanda chinensis</i> (L.) DC.
	<i>Clerodendrum thomsoniae</i> Balf.f.	
	<i>Orthosiphon aristatus</i> (Blume) Miq.	<i>Orthosiphon stamineus</i> Benth.
	<i>Plectranthus amboinicus</i> (Lour.) Spreng.	<i>Coleus amboinicus</i> Lour.
	<i>Plectranthus scutellarioides</i> (L.) R.Br.	<i>Coleus scutellarioides</i> (L.) Benth.
Leguminosae	<i>Pogostemon cablin</i> (Blanco) Benth.	
	<i>Vitex trifolia</i> L.	
	<i>Abrus precatorius</i> L.	
	<i>Caesalpinia pulcherrima</i> (L.) Sw.	
	<i>Parkia speciosa</i> Hassk.	
Lythraceae	<i>Pterocarpus indicus</i> Willd.	
	<i>Tadehagi triquetrum</i> (L.) H.Ohashi	<i>Desmodium triquetrum</i> (L.) DC.
Malvaceae	<i>Woodfordia fruticosa</i> (L.) Kurz	
	<i>Cola acuminata</i> (P.Beauv.) Schott & Endl.	
	<i>Guazuma ulmifolia</i> Lam.	
	<i>Sida rhombifolia</i> L.	
Meliaceae	<i>Urena lobata</i> L.	
	<i>Sandoricum koetjape</i> (Burm.f.) Merr.	<i>Sandoricum indicum</i> Cav.
Menispermaceae	<i>Arcangelisia flava</i> (L.) Merr.	
	<i>Cyclea barbata</i> Miers	
Moraceae	<i>Artocarpus integer</i> (Thunb.) Merr.	
	<i>Ficus deltoidea</i> Jack	
Myrtaceae	<i>Eugenia polyantha</i> Barb. Rodr.	
Oleaceae	<i>Nyctanthes arbor-tristis</i> L.	
Pandaneaceae	<i>Pandanus amaryllifolius</i> Roxb.	
	<i>Pandanus conoideus</i> Lam.	
Passifloraceae	<i>Passiflora quadrangularis</i> L.	
Phyllanthaceae	<i>Phyllanthus buxifolius</i> (Blume) Müll.Arg.	
Piperaceae	<i>Piper sarmentosum</i> Roxb.	
Plantaginaceae	<i>Plantago major</i> L.	

Plumbaginaceae	<i>Plumbago zeylanica</i> L.	
Poaceae	<i>Chrysopogon zizanioides</i> (L.) Roberty	<i>Vetiveria zizanioides</i> (L.) Nash
	<i>Cymbopogon nardus</i> (L.) Rendle	
Polygonaceae	<i>Homalocladium platycladum</i> (F.Muell.) L.H.Bailey	
Portulacaceae	<i>Portulaca oleracea</i> L.	
Primulaceae	<i>Ardisia elliptica</i> Thunb.	
Rubiaceae	<i>Gardenia jasminoides</i> J.Ellis	<i>Gardenia augusta</i> Merr.
	<i>Ixora chinensis</i> Lam.	<i>Ixora stricta</i> Roxb.
	<i>Mussaenda philippica</i> A.Rich.	
Rutaceae	<i>Aegle marmelos</i> (L.) Corrêa	
	<i>Evodia hortensis</i> J.R.Forst. & G.Forst.	<i>Evodia suaveolens</i> Scheff.
	<i>Murraya koenigii</i> (L.) Spreng.	<i>Bergera koenigii</i> L.
	<i>Murraya paniculata</i> (L.) Jack	
Salicaceae	<i>Flacourtia inermis</i> Roxb.	
Sapotaceae	<i>Manilkara zapota</i> (L.) P.Royen	
Simaroubaceae	<i>Brucea javanica</i> (L.) Merr.	
Smilacaceae	<i>Smilax zeylanica</i> L.	
Solanaceae	<i>Brunfelsia uniflora</i> (Pohl) D.Don	
	<i>Datura metel</i> L.	
Talinaceae	<i>Talinum fruticosum</i> (L.) Juss.	<i>Talinum triangulare</i> (Jacq.) Willd.
	<i>Talinum paniculatum</i> (Jacq.) Gaertn.	
Verbenaceae	<i>Clerodendron serrature</i> (L.) Spr.	
	<i>Stachytarpheta jamaicensis</i> (L.) Vahl	
Zingiberaceae	<i>Alpinia galanga</i> (L.) Willd.	
	<i>Boesenbergia rotunda</i> (L.) Mansf.	<i>Boesenbergia pandurata</i> (Roxb.) Schltr.
	<i>Curcuma aeruginosa</i> Roxb.	
	<i>Curcuma zanthorrhiza</i> Roxb.	
	<i>Curcuma zedoaria</i> (Christm.) Roscoe	
	<i>Elettaria cardamomum</i> (L.) Maton	<i>Amomum cardamomum</i> L.
	<i>Kaempferia rotunda</i> L.	
	<i>Zingiber ottensii</i> Valetton	
<i>Zingiber zerumbet</i> (L.) Roscoe ex Sm.	<i>Zingiber aromaticum</i> Valetton	

반둥공대 약용식물원에서 조사한 식물은 26 과 43 종이다(Fig. 2). 가장 많이 재배하고 있는 과(科)는 쥐꼬리망초과(Acanthaceae) 6 종이며 꿀풀과(Lamiaceae, Labiatae) 5 종, 대극과(Euphorbiaceae) 4 종 순서로 자라고 있다. 이 식물원 내의 같은 속(屬) 식물로는 *Barleria lupulina* Lindl., *Barleria prionitis* L.과 *Gynura japonica* (Thunb.) Juel, *Gynura procumbens* (Lour.) Merr. 그리고 *Piper retrofractum* Vahl, *Piper sarmentosum* Roxb. 이다(Table 3).



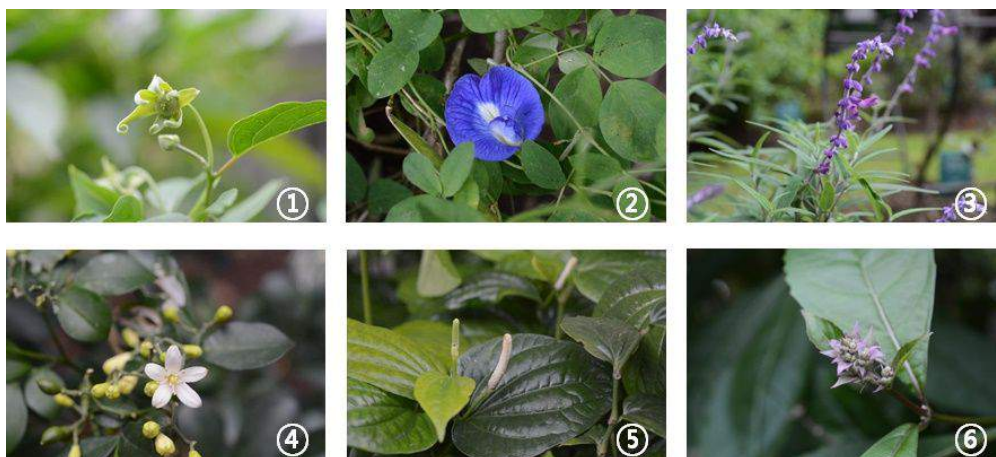


Fig. 2. Some medicinal plants of Medicinal Plant Garden of Bandung Institute of Technology in Indonesia
 ① *Cananga odorata* (Lam.) Hook.f. & Thomson, ② *Clitoria ternatea* L., ③ *Lavandula angustifolia* Mill.
 (= *Lavandula spica* L.), ④ *Murraya paniculata* (L.) Jack, ⑤ *Piper sarmentosum* Roxb., ⑥ *Rothea serrata*
 (L.) Steane & Mabb. (= *Clerodendrum serratum* (L.) Moon)

Table 3. The plant list of Medicinal Plant Garden of Bandung Institute of Technology in Indonesia

Family name	Scientific name	Synonym written on the name tag in the botanical garden
Acanthaceae	<i>Strobilanthes crispera</i> Blume	
	<i>Barleria lupulina</i> Lindl.	
	<i>Barleria prionitis</i> L.	
	<i>Clinacanthus nutans</i> (Burm.f.) Lindau	
	<i>Graptophyllum pictum</i> (L.) Griff.	
	<i>Justicia gendarussa</i> Burm.f.	
Annonaceae	<i>Cananga odorata</i> (Lam.) Hook.f. & Thomson	
	<i>Stelechocarpus burahol</i> (Blume) Hook.f. & Thomson	
Apiaceae	<i>Centella asiatica</i> (L.) Urb.	
Apocynaceae	<i>Parameria laevigata</i> (Juss.) Moldenke	
Araliaceae	<i>Polyscias scutellaria</i> (Burm.f.) Fosberg	<i>Nothopanax scutellarius</i> (Burm.f.) Merr.
Asparagaceae	<i>Cordyline fruticosa</i> (L.) A.Chev.	
Compositae	<i>Gynura japonica</i> (Thunb.) Juel	<i>Gynura segetum</i> (Lour.) Merr.
	<i>Gynura procumbens</i> (Lour.) Merr.	
Crassulaceae	<i>Bryophyllum pinnatum</i> (Lam.) Oken	<i>Kalanchoe pinnata</i> (Lam.) Pers.
Euphorbiaceae	<i>Acalypha hispida</i> Burm.f.	
	<i>Codiaeum variegatum</i> (L.) Rumph. ex A.Juss.	
	<i>Euphorbia tirucalli</i> L.	
	<i>Excoecaria cochinchinensis</i> Lour.	

Iridaceae	<i>Eleutherine bulbosa</i> (Mill.) Urb.	<i>Eleutherine americana</i> (Aubl.) Merr. ex K.Heyne
Lamiaceae	<i>Lavandula angustifolia</i> Mill.	<i>Lavandula spica</i> L.
	<i>Orthosiphon aristatus</i> (Blume) Miq.	
	<i>Plectranthus amboinicus</i> (Lour.) Spreng.	<i>Coleus amboinicus</i> Lour.
	<i>Rotheca serrata</i> (L.) Steane & Mabb.	<i>Clerodendrum serratum</i> (L.) Moon
	<i>Volkameria inermis</i> L.	<i>Clerodendrum inerme</i> (L.) Gaertn.
Lauraceae	<i>Cinnamomum burmanni</i> (Nees & T.Nees) Blume	
Leguminosae	<i>Abrus precatorius</i> L.	
	<i>Clitoria ternatea</i> L.	
Lythraceae	<i>Cuphea hyssopifolia</i> Kunth	
Magnoliaceae	<i>Magnolia champaca</i> (L.) Baill. ex Pierre	<i>Michelia champaca</i> L.
Malvaceae	<i>Cola nitida</i> (Vent.) Schott & Endl.	
Menispermaceae	<i>Cyclea barbata</i> Miers	
Myrtaceae	<i>Melaleuca bracteata</i> F.Muell.	
Piperaceae	<i>Piper retrofractum</i> Vahl	
	<i>Piper sarmentosum</i> Roxb.	
Plumbaginaceae	<i>Plumbago zeylanica</i> L.	
Rubiaceae	<i>Gardenia jasminoides</i> J.Ellis	<i>Gardenia augusta</i> Merr.
	<i>Saprosma arboreum</i> Blume	
Rutaceae	<i>Murraya paniculata</i> (L.) Jack	
Salicaceae	<i>Flacourtia inermis</i> Roxb.	
Talinaceae	<i>Talinum paniculatum</i> (Jacq.) Gaertn.	
Thymelaeaceae	<i>Phaleria macrocarpa</i> (Scheff.) Boerl.	
Zingiberaceae	<i>Alpinia galanga</i> (L.) Willd.	

Bumi Herbal Dago 약용식물원에서 33 과 76 종의 약용식물을 확인했다(Fig. 3). 과(科)별로 정리하면 꿀풀과(Lamiaceae, Labiatae) 10 종, 쥐꼬리망초과(Acanthaceae) 7 종, 국화과(Asteraceae, Compositae) 6 종, 운향과(Rutaceae) 5 종, 후추과(Piperaceae) 4 종이다. 이곳에는 *Piper* 속 식물이 *Piper aduncum* L., *Piper betle* L., *Piper caducibracteum* C.DC., *Piper crocatum* Ruiz & Pav. 4 종 그리고 귤나무속(*Citrus*) 식물이 *Citrus aurantiifolia* (Christm.) Swingle, *Citrus limon* (L.) Osbeck, *Citrus medica* L. 3 종 자라고 있다. 개솔새속(*Cymbopogon*), *Pelargonium*, *Talinum* 식물은 각 2 종이 분포하고 있다(Table 4). 이들 전체의 약용식물 사진은 저자의 연구실에 증거사진으로 보관 중이다.





Fig. 3. Some medicinal plants of Medicinal Plant Garden of Bumi Herbal Dago in Indonesia

- ① *Averrhoa bilimbi* L., ② *Coccinia grandis* (L.) Voigt, ③ *Murraya paniculata* (L.) Jack, ④ *Orthosiphon aristatus* (Blume) Miq., ⑤ *Rothea serrata* (L.) Steane & Mabb. (= *Clerodendrum serratum* (L.) Moon), ⑥ *Tinospora crispa* (L.) Hook. f. & Thomson

Table 4. The plant list of Medicinal Plant Garden of Bumi Herbal Dago in Indonesia

Family name	Scientific name	Synonym written on the name tag in the botanical garden
Acanthaceae	<i>Acanthus montanus</i> (Nees) T.Anderson	
	<i>Andrographis paniculata</i> (Burm.f.) Nees	
	<i>Barleria prionitis</i> L.	
	<i>Clinacanthus nutans</i> (Burm.f.) Lindau	
	<i>Graptophyllum pictum</i> (L.) Griff.	
	<i>Justicia gendarussa</i> Burm.f.	
	<i>Strobilanthes crispa</i> Blume	
Amaranthaceae	<i>Aerva sanguinolenta</i> (L.) Blume	
Apiaceae	<i>Foeniculum vulgare</i> Mill.	
	<i>Petroselinum crispum</i> (Mill.) Fuss	
	<i>Sanicula europaea</i> L.	
Apocynaceae	<i>Allamanda cathartica</i> L.	
	<i>Catharanthus roseus</i> (L.) G.Don	
Araliaceae	<i>Polyscias scutellaria</i> (Burm.f.) Fosberg	<i>Nothopanax scutellarius</i> (Burm.f.) Merr.
Asparagaceae	<i>Cordyline fruticosa</i> (L.) A.Chev.	
Basellaceae	<i>Anredera cordifolia</i> (Ten.) Steenis	
	<i>Basella alba</i> L.	
Berberidaceae	<i>Berberis fortunei</i> Lindl.	
Compositae	<i>Artemisia dracunculus</i> L.	<i>Artemisia dracunculoides</i> Pursh
	<i>Blumea balsamifera</i> (L.) DC.	

	<i>Gynura pseudochina</i> (L.) DC.	
	<i>Pluchea indica</i> (L.) Less.	
	<i>Polymnia sonchifolia</i> Poepp.	
	<i>Stevia rebaudiana</i> (Bertoni) Bertoni	
Costaceae	<i>Cheilocostus speciosus</i> (J.Koenig) C.D.Specht	<i>Costus speciosus</i> (J.Koenig) Sm.
Cucurbitaceae	<i>Coccinia grandis</i> (L.) Voigt	
	<i>Momordica charantia</i> L.	
Euphorbiaceae	<i>Codiaeum variegatum</i> (L.) Rumph. ex A.Juss.	<i>Croton variegatus</i> L.
	<i>Ricinus communis</i> L.	
Geraniaceae	<i>Pelargonium radula</i> (Cav.) L'Hér.	
	<i>Pelargonium zonale</i> (L.) L'Hér. ex Aiton	
Lamiaceae	<i>Clerodendrum indicum</i> (L.) Kuntze	
	<i>Leucas lavandulifolia</i> Sm.	
	<i>Melissa officinalis</i> L.	
	<i>Ocimum basilicum</i> L.	
	<i>Origanum vulgare</i> L.	
	<i>Orthosiphon aristatus</i> (Blume) Miq.	
	<i>Plectranthus scutellarioides</i> (L.) R.Br.	<i>Coleus scutellarioides</i> (L.) Benth.
	<i>Pogostemon cablin</i> (Blanco) Benth.	
	<i>Rothea serrata</i> (L.) Steane & Mabb.	<i>Clerodendrum serratum</i> (L.) Moon
	<i>Tectona grandis</i> L.f.	
Leguminosae	<i>Crotalaria micans</i> Link	<i>Crotalaria anagyroides</i> Kunth
Lythraceae	<i>Lawsonia inermis</i> L.	
Malvaceae	<i>Abelmoschus manihot</i> (L.) Medik.	<i>Hibiscus manihot</i> L.
	<i>Guazuma ulmifolia</i> Lam.	
	<i>Hibiscus sabdariffa</i> L.	
Melastomataceae	<i>Melastoma malabathricum</i> L.	
Menispermaceae	<i>Tinospora crispa</i> (L.) Hook. f. & Thomson	
Moringaceae	<i>Moringa oleifera</i> Lam.	
Myrtaceae	<i>Melaleuca cajuputi</i> Powell	
	<i>Psidium guajava</i> L.	
	<i>Syzygium aromaticum</i> (L.) Merr. & L.M.Perry	<i>Eugenia aromatica</i> (L.) Baill.
Oxalidaceae	<i>Averrhoa bilimbi</i> L.	
Phyllanthaceae	<i>Sauropus androgynus</i> (L.) Merr.	
Phytolaccaceae	<i>Petiveria alliacea</i> L.	
Piperaceae	<i>Piper aduncum</i> L.	
	<i>Piper betle</i> L.	
	<i>Piper caducibracteum</i> C.DC.	
	<i>Piper crocatum</i> Ruiz & Pav.	
Poaceae	<i>Cymbopogon citratus</i> (DC.) Stapf	
	<i>Cymbopogon winterianus</i> Jowitt ex Bor	



	<i>Saccharum officinarum</i> L.	
Rosaceae	<i>Rubus rosifolius</i> Sm.	
Rubiaceae	<i>Gardenia jasminoides</i> J.Ellis	
	<i>Ixora javanica</i> (Blume) DC.	
	<i>Mussaenda philippica</i> A.Rich.	
Rutaceae	<i>Citrus aurantiifolia</i> (Christm.) Swingle	
	<i>Citrus limon</i> (L.) Osbeck	
	<i>Citrus medica</i> L.	
	<i>Murraya paniculata</i> (L.) Jack	
	<i>Triphasia trifolia</i> (Burm.f.) P.Wilson	<i>Triphasia aurantiola</i> Lour.
Selaginellaceae	<i>Selaginella plana</i> (Desv. ex Poir.) Hieron.	
Solanaceae	<i>Solanum muricatum</i> Aiton	
Talinaceae	<i>Talinum fruticosum</i> (L.) Juss.	<i>Talinum triangulare</i> (Jacq.) Willd.
	<i>Talinum paniculatum</i> (Jacq.) Gaertn.	
Xanthorrhoeaceae	<i>Aloe vera</i> (L.) Burm.f.	

결론

인도네시아의 보고르농대 식물원, 반둥공대 약용식물원 및 Bumi Herbal Dago 약용식물원에서 각 46 과 108 종, 26 과 43 종 및 33 과 76 종의 약용식물을 사진 촬영을 통해 조사했다. 보고르농대 식물원에는 국화과(Asteraceae, Compositae), 쥐꼬리망초과(Acanthaceae), 대극과(Euphorbiaceae), 꿀풀과(Lamiaceae, Labiatae), 콩과(Fabaceae, Leguminosae)의 순으로 분포하고 있다. 반둥공대 약용식물원에는 쥐꼬리망초과(Acanthaceae), 꿀풀과(Lamiaceae, Labiatae), 대극과(Euphorbiaceae) 순서로 그리고 Bumi Herbal Dago 약용식물원에는 꿀풀과(Lamiaceae, Labiatae), 쥐꼬리망초과(Acanthaceae), 국화과(Asteraceae, Compositae), 운향과(Rutaceae), 후추과(Piperaceae) 순으로 식물들이 식재되어 있다.

참고문헌

1. Bogor. Published on the Internet; <https://namu.wiki/w/%EB%B3%B4%EA%B3%A0%EB%A5%B4> (accessed 2018-09-05).
2. Bogor Agricultural University. Published on the Internet; https://en.wikipedia.org/wiki/Bogor_Agricultural_University (accessed 2018-09-05).
3. Bandung Conference. Published on the Internet; <https://terms.naver.com/entry.nhn?docId=1846182&cid=43114&categoryId=43114> (accessed 2018-09-05).
4. Bandung Institute of Technology. Published on the Internet; https://en.wikipedia.org/wiki/Bandung_Institute_of_Technology (accessed 2018-09-05).
5. Bumi Herbal Dago. Published on the Internet; <http://bumiherbal.com> (accessed 2018-09-05).
6. The Plant List (2013). Version 1.1. Published on the Internet; <http://www.theplantlist.org> (ac



cessed 2018-09-05).

7. The International Plant Names Index (2012). Published on the Internet; <http://www.ipni.org> (accessed 2018-09-05).
8. 국립수목원. 국가표준식물목록. Published on the Internet; <http://www.nature.go.kr/kpni/index.do> (accessed 2018-09-05).

© The Author(s) 2018, khmi.or.kr

