

Notes on the Herbaceous Plants of Ayer Hitam Forest Reserve, Puchong, Selangor

G. RUSEA¹, M.D. BIBIAN¹, W.K. SOH¹, HAJA MAIDEEN², M. NAZRE³
and I. FARIDAH HANUM³

¹Department of Biology, Faculty of Science and Environmental Studies, Universiti Putra Malaysia,
43400 UPM Serdang, Selangor, Malaysia

²School of Environmental and Natural Resources Sciences, Faculty of Sciences and Technology,
Universiti Kebangsaan Malaysia 43000 UKM Bangi, Selangor, Malaysia

³Faculty of Forestry, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia

Keywords : Herbaceous plants, new records, Ayer Hitam Forest Reserve

ABSTRAK

Berdasarkan kepada tinjauan yang dijalankan terhadap tumbuhan herba, didapati 27 spesies herba yang mewakili 19 famili telah direkodkan di Hutan Simpan Ayer Hitam. Daripada jumlah ini 8 telah direkod untuk pertama kalinya dari hutan ini. Lima spesies endemik di Semenanjung Malaysia juga terdapat di hutan ini. Penemuan ini telah menambahkan senarai semak tumbuhan herba di Hutan Simpan Ayer Hitam kepada 86 spesies.

ABSTRACT

A survey conducted on the plants of Ayer Hitam Forest Reserve recorded 27 species of herbaceous plants which represented 19 families. From this total, 8 species are recorded for the first time from this forest. Five species endemic to Peninsular Malaysia are also found here. This finding has increased the current herb checklist of Ayer Hitam Forest Reserve to 86 species.

INTRODUCTION

The Ayer Hitam Forest Reserve is currently used by the staff and students of UPM to conduct biological research, biodiversity related courses and practical training. This forest is a mixed dipterocarp lowland forest which had been selectively logged between 1936 and 1965. After 35 years of regeneration there are now 430 species of seed plant taxa in 203 genera and 72 families; and 14 families of fern and fern-allies with 33 species recorded (Faridah Hanum 1999). Since then only a few studies had been carried on the herbaceous plants in this forest, notably by Faridah Hanum and Nurulhuda Hamzah (1999), Nasir (1999) and Shariffudeen (1999).

METHODS

Herbaceous plant specimens were randomly collected during the 3-day expedition from 3rd to 5th May 2000 along the highest hill trail, stream near the base camp and trail to the highest

waterfall. The herbaceous plants in this context include fern and fern-allies and herbaceous seed plants. Plant identification and data gathering were partly done in the field and at the herbarium of the Biology Department, UPM. All the specimens were deposited in this herbarium.

RESULTS AND DISCUSSION

27 species of herbaceous plants representing 19 families were collected from Ayer Hitam Forest Reserve (Table 1). The largest family of herbaceous plant collected was represented by fern and fern-allies (7 families, 10 spp.). By comparing the collections from previous works (Faridah Hanum and Nurulhuda 1999, Nasir 1999 and Shariffudeen 1999), 8 additional spp. were collected for the first time from Ayer Hitam Forest Reserve and added to the database of herbaceous plants. Of the total number of herbaceous species enumerated here (27 spp.), 6 species are known Peninsular Malaysian endemics. With this

TABLE 1
Herbaceous plants of Ayer Hitam Forest Reserve, Selangor

Family	Species	Collection No.
Araceae	<i>Scindapsus hederaceus</i> Miq.	AH076
Commelinaceae	<i>Amischotolype griffithii</i> (C.B. Clarke) I.M. Turner*	AH070
	<i>Amischotolype gracilis</i> (Ridl.) I.M. Turner	AH068
Cyatheaceae	<i>Cyathea moluccana</i> R. Br.	AH054
Cyperaceae	<i>Mapania cuspidata</i> (Miq.) var. <i>petiolata</i> (C.B. Clarke) Uittien	AH060
	<i>Cyperus distans</i> L.f.	AH046
Dryopteridaceae	<i>Tectaria barberi</i> (Hook) Copel.	AH053
	<i>Tectaria vasta</i> (Blume) Copel.	AH075
	<i>Tectaria singaporeana</i> (Hook. & Grev.) Copel	AH072
Gesneriaceae	<i>Didymocarpus platypus</i> C.B. Clarke*	AH047
	<i>Didymocarpus serratifolius</i> Ridl.* #	AH036
Hanguanaceae	<i>Hanguana malayana</i> (Jack) Merr.	AH055
Hemionitidaceae	<i>Syngamma wallichii</i> (Hook.) Bedd *	AH048
Marantaceae	<i>Donax grandis</i> (Miq.) Ridl.	AH079
Melastomataceae	<i>Sonerila albiflora</i> Stapf **	AH050,062
	<i>Phyllagathis hispida</i> King **	AH044
	<i>Phyllagathis griffithii</i> (Hook. f. ex Triana) King #	AH042
Myrsinaceae	<i>Labisia pumila</i> Blume	AH064
Piperaceae	<i>Piper stylosum</i> Miq.	AH077
Rubiaceae	<i>Hedyotis philippinensis</i> (Wild. ex Spreng) Merr. ex C.B. Rob	AH002
Selaginellaceae	<i>Selaginella wallichii</i> (Hook. & Grev.) Spring	AH040
	<i>Selaginella intermedia</i> (Blume) Spring var. <i>intermedia</i>	AH004
Taccaceae	<i>Tacca leontopetaloides</i> (L.) Kuntze	AH003
Taenitidaceae	<i>Taeniis blechnoides</i> (Willd.) Sw.	AH001
Thelypteridaceae	<i>Pronephrium triphyllum</i> (Sw.) Holttum *	AH067
Woodsiaceae	<i>Diplazium crenatoserratum</i> (Sw.) T. Moore	AH043
Zingiberaceae	<i>Globba variabilis</i> Ridl. ssp. <i>variabilis</i> **	AH039

* Recorded for the first time in Ayer Hitam Forest

Endemic to Peninsular Malaysia

addition, the total number of endemic plant species in Ayer Hitam is now 26. Previously recorded endemics are trees (20 spp.) (Faridah Hanum 1999).

CONCLUSION

Eight more species are added to the current checklist of herbaceous plants in Ayer Hitam Forest, now totalling 86 species. The findings suggest that the present data on herbaceous plants of Ayer Hitam Forest Reserve is still in the infancy stage and require further studies. It is not impossible that this forest harbours many species of herbaceous plant which may be potential resources of new drugs and ornamentals for the house and garden.

ACKNOWLEDGEMENT

We would like to thank the Expedition Committee for inviting us to join the expedition

and study the herbaceous plants of Ayer Hitam Forest Reserve. This study was supported by the Government of Malaysia through IRPA 08-02-04-0025 and IRPA 08-02-04-0089 for which the authors are grateful.

REFERENCES

- FARIDAH HANUM, I. 1999. Plant diversity and conservation value of Ayer Hitam Forest, Selangor, Peninsular Malaysia. *Pertanika Journal of Tropical Agricultural Science* 22(2): 73 - 83.
- FARIDAH HANUM, I. and NURULHUDA HAMZAH. 1999. Comparison and uses of medicinal plants of Ayer Hitam Forest, Selangor, Peninsular Malaysia. *Pertanika Journal of Tropical Agricultural Science* 22(2): 85-94.
- KOCHUMMEN, K.M., J.V. LAFRANKIE and N. MANOKARAN. 1990. Floristic comparison of

Pasoh Forest Reserve, a lowland rain forest in Peninsular Malaysia. *Journal of Tropical Forest Science* 3(1): 1-13.

NASIR ABDUL RACHMAN. 1999. Ferns and fern-allies in Ayer Hitam Forest Reserve, Puchong. B.Sc. Thesis, Faculty of Forestry, UPM (unpublished).

SHARIFFUDEEN, P.S. 1999. Herbs and shrubs of Ayer Hitam Forest Reserve, Puchong. B.Sc. Thesis, Faculty of Forestry, UPM (unpublished).