

## Five species of gliding lizard *Draco* spp. at Gunung Pulai, Johor, Peninsular Malaysia

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**Observer:** Nick Baker.

**Photographs by:** Nick Baker.

**Subjects identified by:** Nick Baker.

**Location:** Gunung Pulai Forest Reserve, Johor, Peninsular Malaysia (Lat 1° 36.100'N Long 103° 32.750'E)

**Habitat:** Lowland primary forest and hill forest (Fig. 1).

**Date:** 2009-2015 (all during daytime).

### Identity of subjects and descriptions of observation:

- 1) Orange-bearded Gliding Lizard, *Draco abbreviatus* (Reptilia: Squamata: Agamidae), three photographed (2010, 2011, 2013). Example from 20 July 2011 in Fig. 2.
- 2) Formosa Gliding Lizard, *Draco formosus* (Reptilia: Squamata: Agamidae), eight photographed (2009, 2010 (2), 2011, 2013, 2014, 2015 (2)). Example from 12 January 2015 in Fig. 3.
- 3) Black-bearded Gliding Lizard, *Draco melanopogon* (Reptilia: Squamata: Agamidae), two photographed (2013, 2015). Example from 12 January 2015 in Fig. 4.
- 4) Five-banded Gliding Lizard, *Draco quinquefasciatus* (Reptilia: Squamata: Agamidae), one photographed on 31 May 2011, Fig. 5.
- 5) Sumatran Gliding Lizard, *Draco sumatranus* (Reptilia: Squamata: Agamidae), one photographed on 05 March 2013, Fig. 6.

**Remarks:** Gunung Pulai Forest Reserve comprises an area of approximately 5,300 hectares of mainly primary forest, with some areas of logged secondary forest at the margins. Its summit reaches around 650 metres. The records listed here are ad-hoc sightings made during 20 daytime trips (each averaging 3 hours) to the forest reserve between 2009 and 2015.

There are eleven species of *Draco* in Peninsular Malaysia (Grismer, 2011). The five species documented here represent the full quota of *Draco* species to be expected in the southernmost part of the Malay Peninsula, based on known geographic ranges in Grismer (2011). In the latter publication only *Draco melanopogon* and *Draco sumatranus* are documented at Gunung Pulai, thus the records for *Draco abbreviatus*, *Draco formosus* and *Draco quinquefasciatus* are here considered as newly documented finds. The presence of 5 species of *Draco* at a single location such as Gunung Pulai illustrates the degree to which these lizards "partition the resources of their environment" to quote Grismer (2011).

Gunung Pulai is the nearest lowland, primary forest to Singapore, whose remaining primary forest, protected by the nature reserves of Bukit Timah and Central Catchment, lie 32 km to the southeast. Baker & Lim (2012) list just 3 species of *Draco* as being extant in Singapore, namely *Draco melanopogon*, *Draco quinquefasciatus* and *Draco sumatranus*: in the same publication *Draco abbreviatus* is listed as 'indeterminate' and *Draco formosus* is not listed.



Fig. 1 : Hill forest at Gunung Pulai.

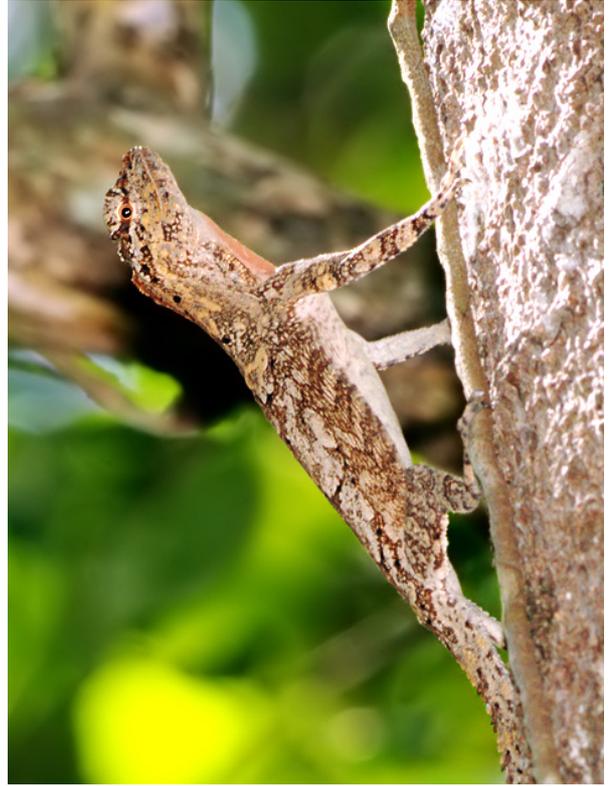


Fig. 2 : *Draco abbreviatus*, 20 July 2011.



Fig. 3 : *Draco formosus*, 12 January 2015.



Fig. 4 : *Draco melanopogon* (female), 12 January 2015.



Fig. 5 : *Draco quinquefasciatus* (male), 31 May 2011.



Fig. 6 : *Draco sumatranus* (female), 05 March 2013.

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#### References:

Baker, N., & K. K. P. Lim, K. (2012). *Wild Animals of Singapore: A Photographic Guide to Mammals, Reptiles, Amphibians and Freshwater fishes (updated edition)*. Vertebrate Study Group, Nature Society (Singapore). Draco Publishing. 180 pp.

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