

Observation of Lesser Dog-faced Fruit Bat (*Cynopterus brachyotis*) feeding on *Piper aduncum* in Makilala, North Cotabato, Philippines

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Observer: Andrie Bon A. Flores.
Photograph by: Andrie Bon A. Flores.
Subjects identified by: Krizler C. Tanalgo, Andrie Bon A. Flores.

Location: Purok 6, Barangay Batasan, Municipality of Makilala, North Cotabato Province, Mindanao, Philippines.
Elevation: 1,010 metres ASL.
Habitat: Agricultural area.
Date and time: 11 September 2020, 19:30 hrs.

Identity of subjects:

- i) Lesser Dog-faced Fruit Bat, *Cynopterus brachyotis* (Mammalia: Chiroptera: Pteropodidae).
- ii) Spiked Piper, *Piper aduncum* (Dicotyledonae: Piperales: Piperaceae)

Description of record: During a rapid biodiversity survey in Malasila Watershed in Makilala, North Cotabato, we observed a Lesser short-nosed fruit bat (*Cynopterus brachyotis*) foraging on Spiked Piper (*Piper aduncum*) (Fig. 1). We opportunistically observed the fruit bat feeding on base to the tip of the matured tail-like infructescence of the *Piper* plant. It took at least 4 minutes for the bat to successfully finish feeding on a single infructescence before leaving the plant. A supplementary video is included in the references (Flores & Tanalgo, 2020).



Fig. 1

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Remarks:

The observed fruit bat was identified as a sexually mature Lesser Dog-faced Fruit Bat, also known as Lesser Short-nosed Fruit Bat, (*Cynopterus brachyotis*) based on its distinct external morphologies such as the (i) the ventral to dorsal fur is yellowish-brown to grey, with golden brown fur in the shoulder to the entire neck part, (ii) white linings from the base to the tip of the ears, which is distinct for this species. We cannot identify the sex of the observed individual. *C. brachyotis* is a least-threatened fruit bat that occurs widely in different habitat types from forests to degraded habitats across the Philippines (Tanalgo & Hughes, 2019). This species is poorly studied in terms of its diet and ecological function in the country (Tanalgo & Hughes, 2018).

The plant was identified as Spiked Piper (*Piper aduncum*): it is a small tree or a shrub that is approximately 7 metres tall, with flowers crowded in the rank of regular transverse and usually white to pale yellow that turns to green when it becomes mature. *P. aduncum* is native to Central and South America and is considered invasive in lowland areas of North Cotabato from near forests to degraded habitats such as plantation edges. Although it was anecdotally reported before that the seeds of this *Piper* species are dispersed by fruit bats, this is the first documented report of *Piper*-fruit bat interaction in the Philippines. We recommend in-depth observations on this interaction.

References:

Flores, A.B. and Tanalgo, K.C. (2020). Bat-*Piper* plant interaction [Video file]:
Figshare <https://doi.org/10.6084/m9.figshare.12954974.v2>

Tanalgo, K.C. and Hughes, A.C. (2018). Bats of the Philippine Islands –a review of research directions and relevance to national-level priorities and targets. *Mammalian Biology* 91:46–56.

Tanalgo, K.C. and Hughes, A.C. (2019). Priority-setting for Philippine bats using practical approach to guide effective species conservation and policy-making in the Anthropocene. *Hystrix, the Italian Journal of Mammalogy* 30:74-83.