

Varma, S., Rajesh, T. P., Manoj, K., Asha, G., Jobiraj, T. and Sinu, P.: A. 2020. Nectar robbers deter legitimate pollinators by mutilating flowers. – Oikos doi: 10.1111/oik.06988

Appendix 1

Table A1. Flower visitors on *Leucas aspera*, and their forage type (pollen (P) and nectar (N)). This excludes the ant species observed visiting open calyx of one day old shed flowers.

Visitor type	Visitor species	Foraging type
Bee	<i>Apis dorsata</i> *	P+N
Bee	<i>Apis florea</i> ^{•◦}	P+N
Bee	<i>Apis cerana</i> *	P+N
Bee	<i>Halictus</i> sp.5 ^{•◦}	P+N
Bee	<i>Megachile bicolor</i> *	P+N
Bee	<i>Amegilla candida</i> *	P+N
Bee	<i>Tetragonula iridipennis</i> ^{•◦}	P+N
Bee	<i>Xylocopa collaris</i> *	N
Bee	<i>Megachile</i> sp.3*	P+N
Bee	<i>Megachile</i> sp.4*	P+N
Bee	<i>Ceylaticus</i> sp. [•]	P
Bee	<i>Braunsapis</i> sp. ^{•◦}	P+N
Bee	<i>Halictus</i> sp.3 ^{•◦}	P+N
Bee	<i>Ceratina hieroglyphica</i> ^{•◦}	P+N
Bee	<i>Megachile fulvovestita</i> *	P+N
Bee	<i>Amegilla</i> sp.*	P+N
Bee	<i>Amegilla zonata</i> *	P+N
Bee	<i>Nomia curvipes</i> *	P+N
Bee	<i>Megachile disjuncta</i> *	P+N
Bee	<i>Xylocopa acutipennis</i> *	P+N
Bee	<i>Gnathonomia thoracica</i> *	P+N
Bee	<i>Thyreus histrio</i> *	P+N
Bee	<i>Xylocopa</i> sp.*	P+N
Bee	<i>Xylocopa latipes</i> *	P+N
Bee	<i>Thyreus surniculus</i> *	P+N
Bee	<i>Amegilla cingulata</i> *	P+N
Bee	<i>Seladonia</i> sp. ^{•◦}	P+N
Bee	<i>Ceratina unimaculata</i> ^{•◦}	P+N
Bee	<i>Pseudapis</i> sp.*	P+N
Bee	<i>Hoplonomia elliotii</i> *	P+N
Bee	<i>Gnathonomia</i> sp.1*	P+N
Bee	<i>Halictus</i> sp.7 [•]	P+N

Bee	<i>Gnathonomia</i> sp.2*	P+N
Bee	<i>Ceratina smaragdula</i> •	P+N
Bee	<i>Chelostoma</i> sp.*	P+N
Beetle	Elateridae	P
Butterfly/Moth	<i>Ariadne ariadne</i>	N
Butterfly/Moth	<i>Macroglossum</i> sp.2	N
Butterfly/Moth	<i>Danaus genutia</i>	N
Butterfly/Moth	<i>Danaus chrysippus</i>	N
Butterfly/Moth	<i>Borbo cinnara</i>	N
Butterfly/Moth	<i>Junonia atlites</i>	N
Butterfly/Moth	<i>Catopsilla pyranthe</i>	N
Butterfly/Moth	<i>Tarucus ananda</i>	N
Butterfly/Moth	Hesperiidae sp.2	N
Butterfly/Moth	<i>Graphium agamemnon</i>	N
Butterfly/Moth	<i>Acraea violae</i>	N
Butterfly/Moth	<i>Junonia almana</i>	N
Butterfly/Moth	<i>Lambrix salsala</i>	N
Butterfly/Moth	<i>Leptosia nina</i>	N
Butterfly/Moth	<i>Eurema hecabe</i>	N
Butterfly/Moth	Moth sp.	N
Butterfly/Moth	<i>Macroglossum</i> sp.1	N
Butterfly/Moth	<i>Tirumala limniace</i>	N
Butterfly/Moth	<i>Papilio polytes</i>	N
Butterfly/Moth	<i>Catopsilia pomona</i>	N
Butterfly/Moth	Hesperiidae sp.1	N
Butterfly/Moth	<i>Lampides boeticus</i>	N
Butterfly/Moth	<i>Papilio demoleus</i>	N
Butterfly/Moth	<i>Eurema blanda</i>	N
Butterfly/Moth	Butterfly sp.4	N
Fly	Diptera sp.9	N
Fly	Diptera sp.8	N
Fly	Diptera sp.1	N
Fly	<i>Tabanus</i> sp.	N
Fly	Syrphid fly sp.1	N
Fly	Diptera sp.4	N
Fly	Syrphid fly sp.2	N
Fly	Diptera sp.6	N
Fly	Diptera sp.2	N
Wasp	Wasp sp.1	P+N
Wasp	<i>Micromeriella marginella</i>	P+N
Wasp	<i>Delta esuriens</i>	P+N
Wasp	<i>Phimenes flavopictum</i>	P+N
Wasp	<i>Campsomeriella collaris</i>	P+N
Wasp	<i>Colpacampsomeris indica</i>	P+N

*large bees •small bees •°secondary robber bees

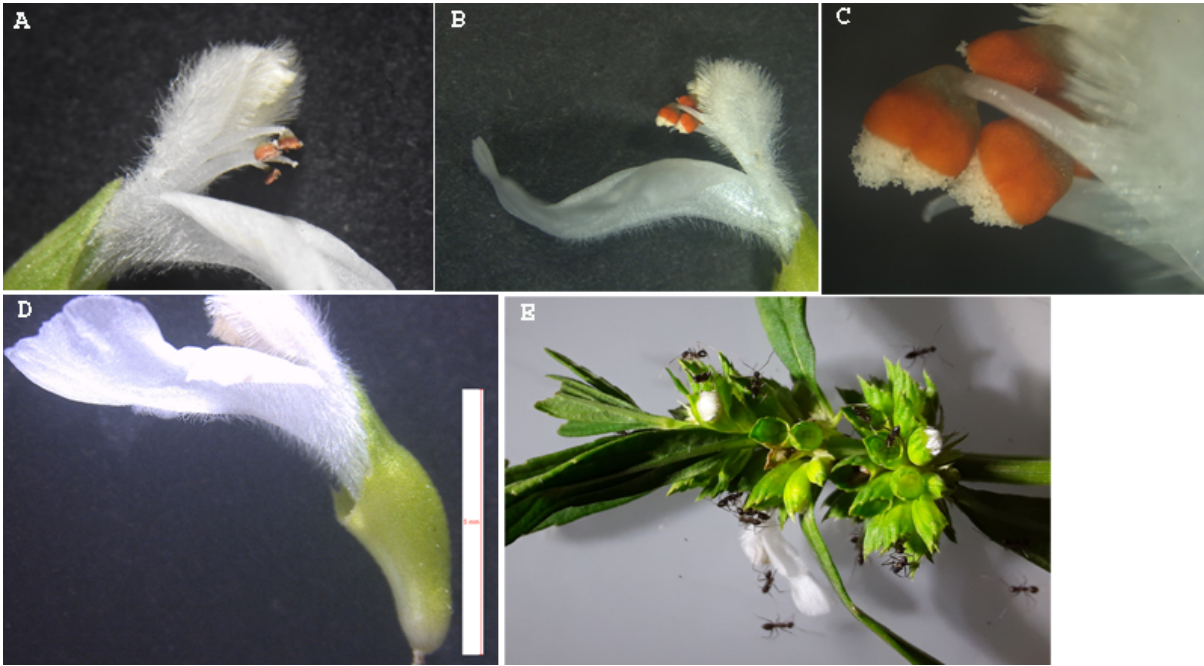


Figure A1. (A) A close-up view of a *L. aspera* flower; (B) and (C) the four anther filaments and the bifid stigma (one lobe curved downward and another stands straight between anthers) when pulled out from the upper hood like petal; (D) an oblique toothed and corrugated calyx cup protecting the corolla tube; (E) ants harvesting nectar from open calyx of one day old shed flowers.

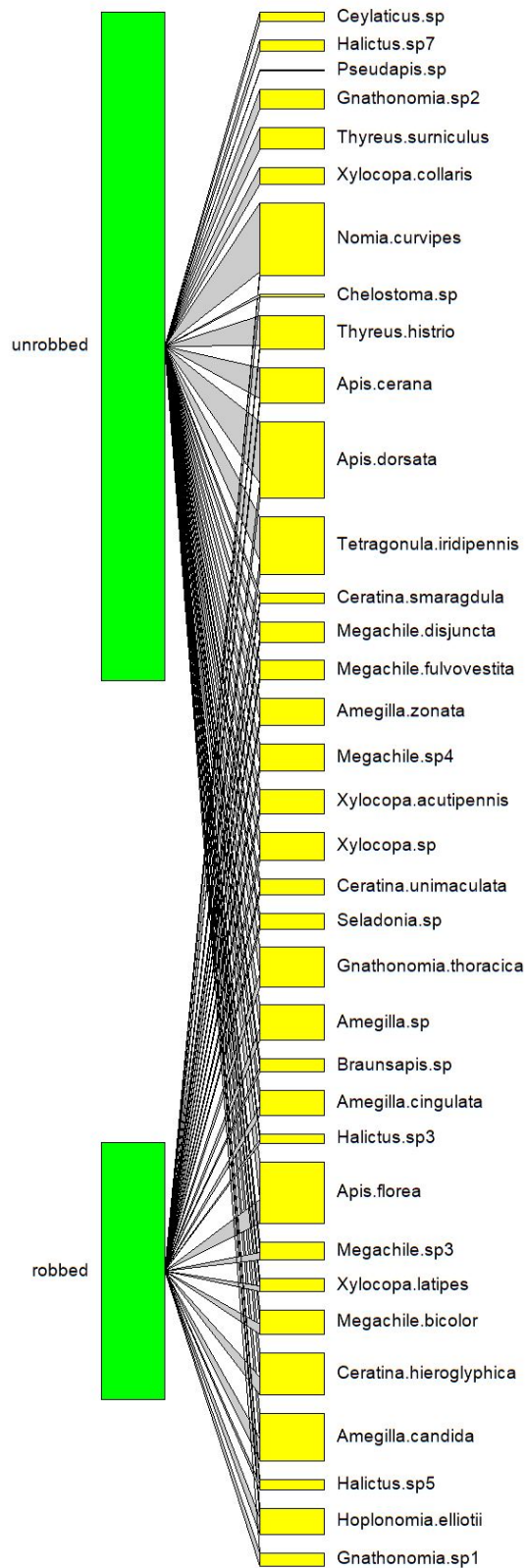


Figure A2. Interaction network of legitimate bee pollinators on robbed and unrobbed flowers shows different bee community composition on robbed and unrobbed flowers. Interaction Evenness (robbed = 0.79; unrobbed = 0.86), Shannon diversity (robbed = 2.67; unrobbed = 3.07), and Connectance (robbed = 0.86; unrobbed = 1.0) were low for robbed flower–pollinator network.