 DOI: 10.1086/664082

Appendix from V. Novotny et al., "Insects on Plants: Explaining the Paradox of Low Diversity within Specialist Herbivore Guilds"

(Am. Nat., vol. 179, no. 3, p. 351)

Plant-Herbivore Food Web Data with Additional Analyses

The original data on the composition of herbivorous guilds are deposited in the Dryad repository (Dryad data: http://dx.doi.org/10.5061/dryad.rg155q32).

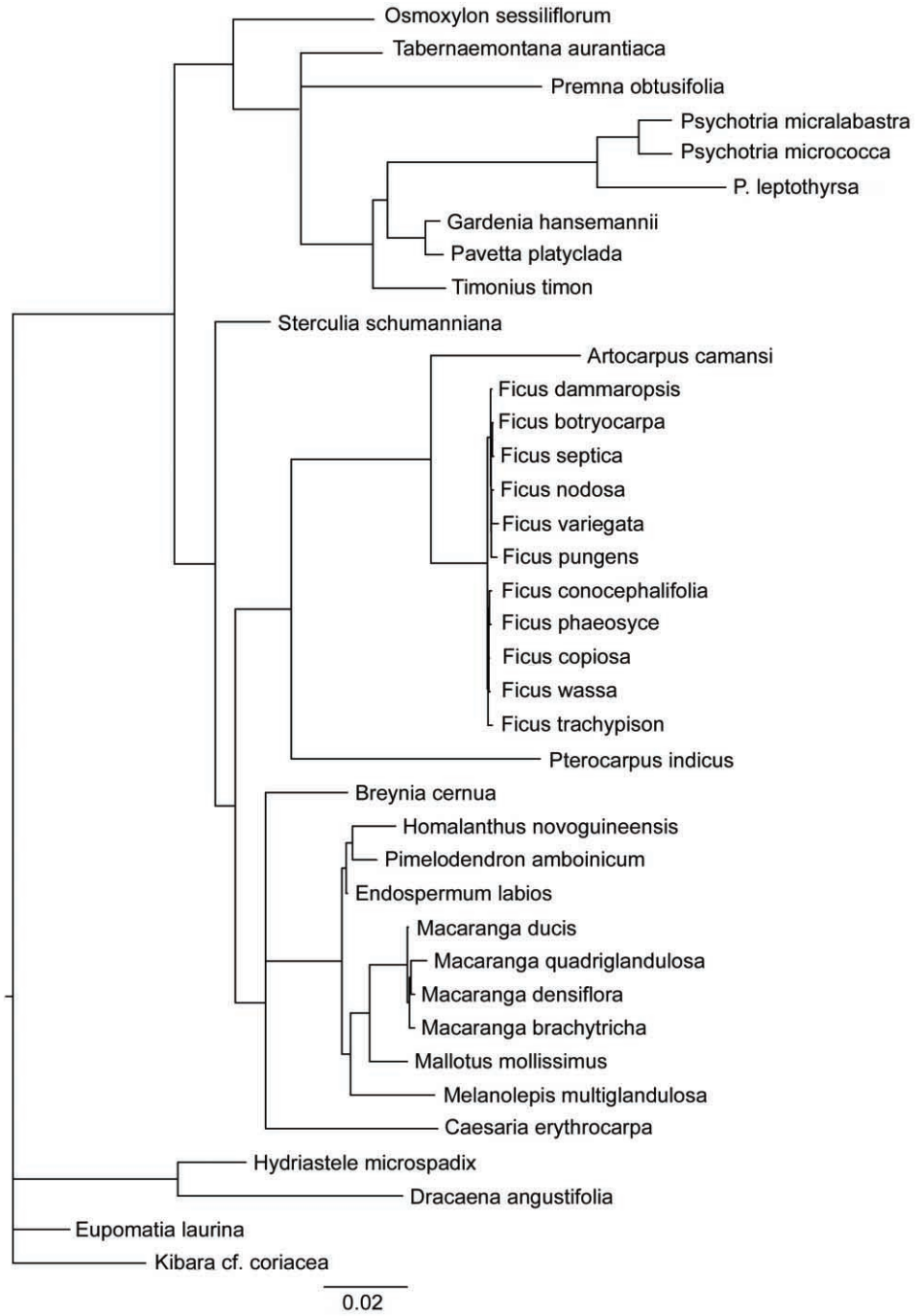

Figure A1: Phylogenetic relationships among the studied plant species. Branch lengths are proportional to the number of nucleotide substitutions in rbcL sequences. The methods used to construct the plant phylogeny are described by Novotny et al. (2010).

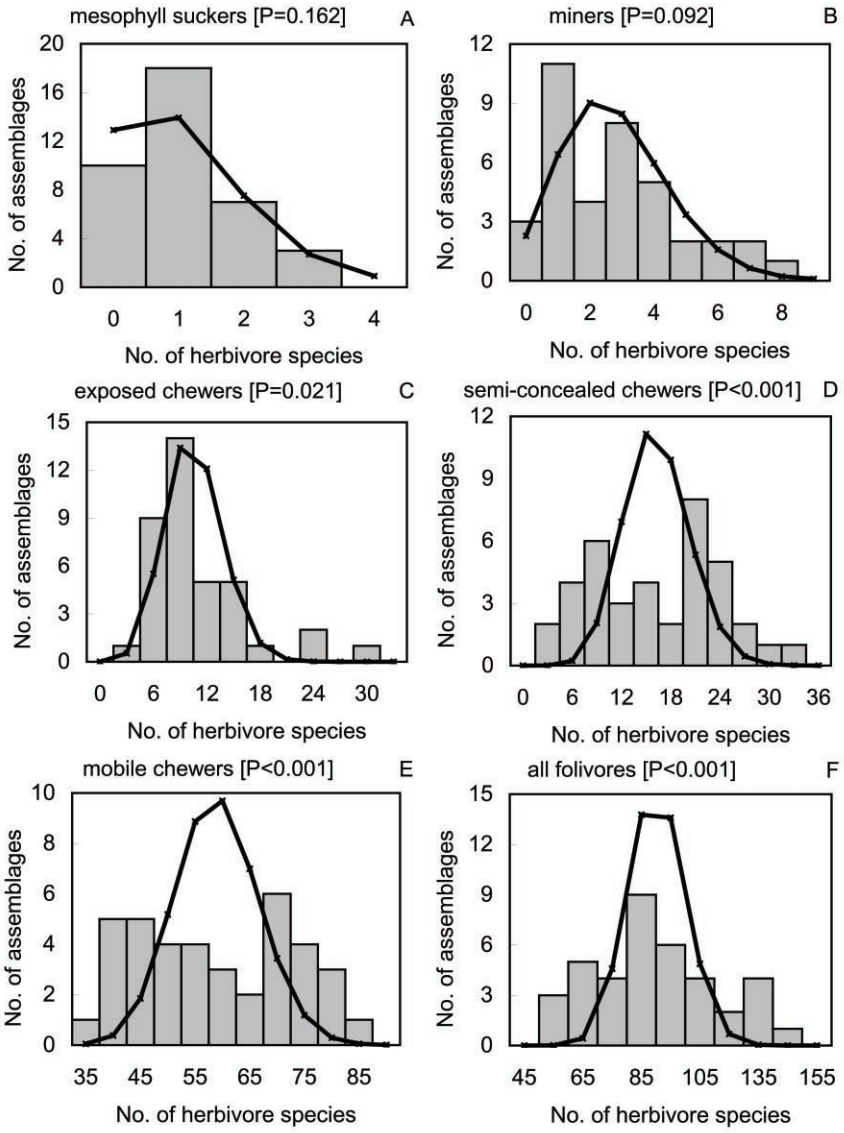

Figure A2: Distribution of species-richness values (number of species on individual plant species, h_j) observed in different folivorous guilds (*A–E*) and the entire folivorous assemblage (*F*), with expected values for a Poisson distribution (line) for the complete data set, including trophic links supported by single herbivore individuals. The h_j distribution is significantly different from the Poisson distribution in all guilds except miners (*A*) and mesophyll suckers (*B*; χ^2 test, *P* value is reported above each histogram).

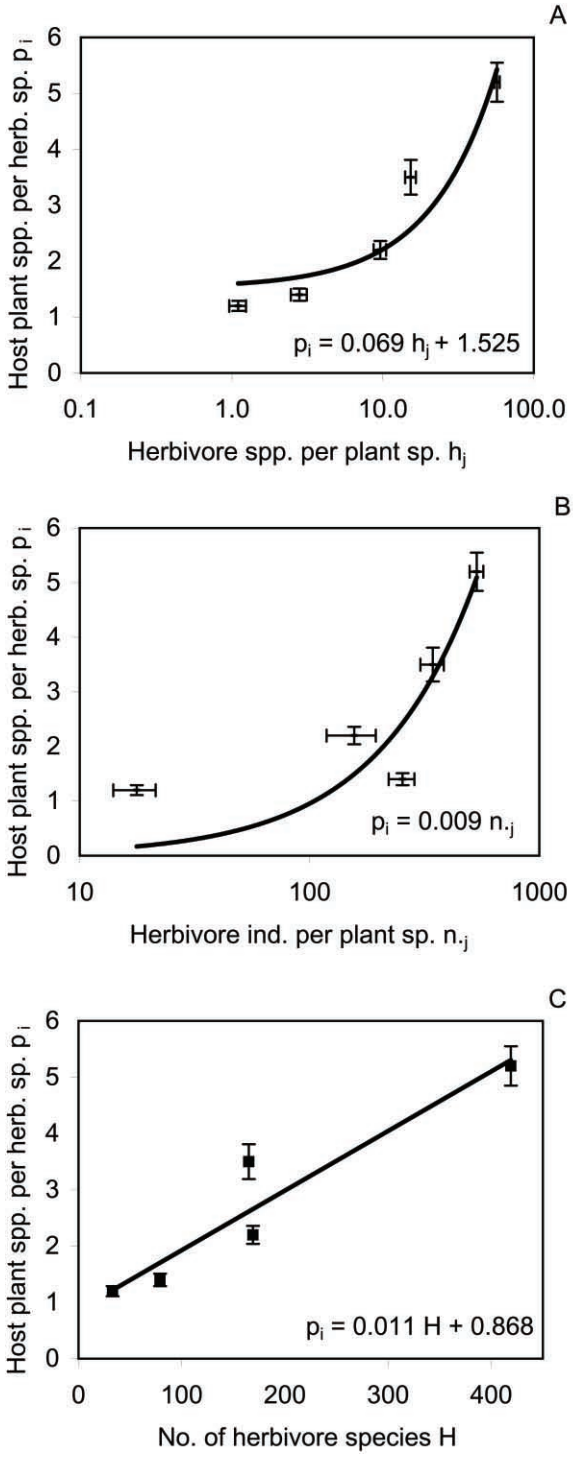

Figure A3: Relationship between average herbivore host range $\bar{p}_i$ and species richness $\bar{h}_j$ (*A*; $r = 0.946$, $P = .015$), herbivore load $\bar{n}_{.j}$ (*B*; $r = 0.907$, $P = .034$), and total herbivore species richness H (*C*; $r = 0.949$, $P = .014$) for the complete data set, including trophic links supported by single herbivore individuals. See table 1 for definitions of the variables.

Table A1. Species richness of folivorous guilds on the studied plant species

Plant species	Family	MC	SC	EC	MI	MS
Tabernaemontana aurantiaca Gaudich.	Apocynaceae	22	1	3	1	0
Osmoxylon sessiliflorum (Lauterb.) Philipson	Araliaceae	23	4	7	2	0
Hydriastele microspadix (Becc.) Burret.	Arecaceae	17	2	1	3	0
Endospermum labios Schodde	Euphorbiaceae	20	5	4	1	0
Homalanthus novoguineensis K. Schum.	Euphorbiaceae	43	7	8	0	1
Macaranga cf. *brachytricha* Airy Shaw	Euphorbiaceae	30	15	7	5	0
Macaranga densiflora Warb.	Euphorbiaceae	37	14	5	6	2
Macaranga ducis Whitmore	Euphorbiaceae	30	13	4	3	2
Macaranga quadriglandulosa Warb.	Euphorbiaceae	39	21	6	6	1
Mallotus mollissimus (Geisel.) Airy Shaw	Euphorbiaceae	30	8	3	3	2
Melanolepis multiglandulosa Rchb. & Zoll.	Euphorbiaceae	40	3	2	0	1
Pimelodendron amboinicum Hassk.	Euphorbiaceae	23	6	11	1	0
Eupomatia laurina R. Br.	Eupomatiaceae	21	5	4	1	1
Pterocarpus indicus Willd.	Fabaceae	28	21	17	1	1
Premna obtusifolia R.Br.	Lamiaceae	25	13	7	3	1
Sterculia schumanniana (Lauterb.) Mildbr.	Malvaceae	42	15	9	5	1
Kibara cf. *coriacea* (Blume) Hook.f. & Thomson	Monimiaceae	22	8	6	3	1
Artocarpus camansi Blanco	Moraceae	36	2	1	1	1
Ficus botryocarpa Miq.	Moraceae	18	17	4	2	1
Ficus conocephalifolia Ridley	Moraceae	40	15	3	3	1
Ficus copiosa Steud.	Moraceae	38	11	5	4	3
Ficus dammaropsis Diels	Moraceae	37	13	4	2	1
Ficus nodosa Teysm. & Binn.	Moraceae	33	26	2	2	1
Ficus phaeosyce Laut. & K. Schum.	Moraceae	30	15	4	1	0
Ficus pungens Reinw. ex Blume	Moraceae	39	11	4	4	1
Ficus septica Burm. f.	Moraceae	18	15	2	4	0
Ficus trachypison K. Schum.	Moraceae	31	11	3	1	1
Ficus variegata Blume	Moraceae	32	17	5	4	1
Ficus wassa Roxb.	Moraceae	46	17	6	3	2
Breynia cernua (Poir.) Muell. Arg.	Phyllanthaceae	17	13	10	3	1
Gardenia hansemannii K. Schum.	Rubiaceae	32	2	4	5	0
Pavetta platyclada K.Schum. & Lauterb.	Rubiaceae	31	3	1	2	0
Psychotria leptothyrsa Miq.	Rubiaceae	26	1	3	0	0
Psychotria micralabastra Valeton	Rubiaceae	40	5	3	1	0
Psychotria micrococca Valeton	Rubiaceae	37	5	2	2	0
Timonius timon (Spreng.) Merr.	Rubiaceae	35	12	6	1	0
Dracaena angustifolia Roxb.	Ruscaceae	16	4	4	0	1
Casearia erythrocarpa Sleumer	Salicaceae	19	6	7	2	1

Note: The number of feeding species (excluding singletons) sampled from 1,500 m^2 of foliage per plant species is reported for mobile (MC), semiconcealed (SC), and exposed (EC) chewers, miners (MI), and mesophyll suckers (MS).