

APPENDIX. Summary of data sources for the analyses. Entries are community data for plantfrugivore and plantpollinator interactions summarizing the number of species, n ; number of interactions, k ; median number of interactions per species, $\langle k \rangle$; gamma exponent for the fitting model (see text), \square truncation value of k (i.e., the k value beyond which the cumulative distribution departs from a Power law fit see text); the best fitted model and its characteristic type of scale; and the literature sources for the data. The data are summarized separately for the seed dispersal and the pollination mutualisms; for each of them, the data are available for the plants and animal species separately. NA, not available.

CODE	n	k	$\langle k \rangle$	\square	k_x	Best Fit	Scale	Reference
Seed dispersal – Animal species								
BEEH	40	119	2,98	1,050	11,91	Truncated power law	Broad scale	Beehler B. (1983) Frugivory and polygamy in birds of paradise. <i>Auk</i> , 100, 112.
SORE	17	22	1,29	1,520	3,01	Truncated power law	Broad scale	Sorensen A.E. (1981) Interactions between birds and fruit in a temperate woodland. <i>Oecologia (Berl.)</i> , 50, 242249.
FROS	26	110	4,23	1,430	11,00	Truncated power law	Broad scale	Frost P.G.H. (1980) Fruitfrugivore interactions in a South African coastal dune forest. In: <i>Acta XVII Congressus Internationalis Ornithologici</i> (ed. Noring R), pp. 11791184. Deutsche Ornithologische Ges., Berlin, Germany.
GUIT	19	40	2,11	1,610	5,95	Truncated power law	Broad scale	Guitián J. (1983) Relaciones entre los frutos y los passeriformes en un bosque montano de la cordillera cantabrica occidental. Unpubl. Ph. D. Thesis, Univ. Santiago, Spain.
GEN1	25	38	1,52	1,040	5,01	Exponential	Single scale	Galetti M. & Pizo M.A. (1996) Fruit eating birds in a forest fragment in southeastern Brazil. <i>Ararajuba, Rev. Brasil. Ornitol.</i> , 4, 7179.
GEN2	66	147	2,23	0,850	5,95	Truncated power law	Broad scale	Galetti M. & Pizo M.A. (1996) Fruit eating birds in a forest fragment in southeastern Brazil. <i>Ararajuba, Rev. Brasil. Ornitol.</i> , 4, 7179.
KANT	32	86	2,69	1,740	3,01	NA	NA	Kantak G.E. (1981) Temporal feeding patterns of some tropical frugivores. <i>Condor</i> , 83, 185118.
WYTH	25	47	1,88	1,320	3,01	NA	NA	Snow B.K. & Snow D.W. (1988) <i>Birds and berries</i> , Calton, England.
LOPE	27	75	2,78	1,780	10,00	Truncated power law	Broad scale	Tutin C.E.G., Ham R.M., White L.J.T. & Harrison M.J.S. (1997) The primate community of the Lopé Reserve, Gabon: diets, responses to fruit scarcity, and effects on biomass. <i>Am. J. Primatol.</i> , 42, 124.

SAPF	35	60	1,71	0,560	6,94	Power law	Scale free	Noma N. (1997) Annual fluctuations of sapfruits production and synchronization within and inter species in a warm temperate forest on Yakushima Island, Japan. <i>Tropics</i> , 6, 441449.
MONT	210	436	2,08	0,320	3,98	Truncated power law	Broad scale	Wheelwright N.T., Haber W.A., Murray K.G. & Guindon C. (1984) Tropical fruiteating birds and their food plants: a survey of a Costa Rican lower montane forest. <i>Biotropica</i> , 16, 173192.
CROM	80	142	1,78	0,440	21,96	Truncated power law	Broad scale	Crome F.H.J. (1975) The ecology of fruit pigeons in tropical Northern Queensland. <i>Aust. Wildl. Res.</i> , 2, 155185.
SNOW	64	234	3,66	1,400	2,98	Truncated power law	Broad scale	Snow B.K. & Snow D.W. (1971) The feeding ecology of tanagers and honeycreepers in Trinidad. <i>Auk</i> , 88, 291322.
CORR	58	148	2,55	0,940	5,01	Truncated power law	Broad scale	Pedro Jordano, unpublished data. Mediterranean montane forest, SE Spain.
HRAT	33	121	3,67	1,410	5,01	Truncated power law	Broad scale	Jordano P. (1985) El ciclo anual de los paseriformes frugívoros en el matorral mediterráneo del sur de España: importancia de su invernada y variaciones interanuales. <i>Ardeola</i> , 32, 6994.
VISO	24	65	2,71	1,220	5,01	Truncated power law	Broad scale	Herrera C.M. (1984) A study of avian frugivores, birddispersed plants, and their interaction in mediterranean scrublands. <i>Ecol. Monogr.</i> , 54, 123.
Pollination – Animal species								
CEP1	185	361	1,95	0,930	7,94	Power law	Scale free	Arroyo M.T.K., Primack R. & Armesto J. (1982) Community studies in pollination ecology in the high temperate Andes of Central Chile. I. Pollination mechanisms and altitudinal variation. <i>Am. J. Bot.</i> , 69, 8297.
CEP2	107	196	1,83	1,130	2,98	Truncated power law	Broad scale	Arroyo M.T.K., Primack R. & Armesto J. (1982) Community studies in pollination ecology in the high temperate Andes of Central Chile. I. Pollination mechanisms and altitudinal variation. <i>Am. J. Bot.</i> , 69, 8297.
CEP3	61	81	1,33	1,010	7,94	Power law	Scale free	Arroyo M.T.K., Primack R. & Armesto J. (1982) Community studies in pollination ecology in the high temperate Andes of Central Chile. I. Pollination mechanisms and altitudinal variation. <i>Am. J. Bot.</i> , 69, 8297.
ABIS	142	242	1,70	1,350	9,08	Power law	Scale free	Elberling H. & Olesen J.M. (1999) The structure of a high latitude plantflower visitor system: the dominance of flies. <i>Ecography</i> , 22, 314323.
ZACK	107	456	4,26	0,890	10,00	Exponential	Single scale	Elberling H. & Olesen J.M., unpublished data. Arctic tundra, Greenland.

MAUR	27	52	1,93	0,890	2,98	Truncated power law	Broad scale	Olesen, J.M., Eskildsen, L.I. & Venkatasami, S. (2002) Invasion of pollination networks on oceanic islands: importance of invader complexes and endemic super generalists. <i>Diversity and Distributions</i> , 8, 181-192.
DONA	205	412	2,01	1,330	6,94	Power law	Scale free	Herrera J. (1988) Pollination relationships in Southern Spanish mediterranean shrublands. <i>J. Ecol.</i> , 76, 274-287.
HOCK	110	179	1,63	1,460		Truncated power law	Broad scale	Hocking B. (1968) Insect flower associations in the high Arctic with special reference to nectar. <i>Oikos</i> , 19, 359-387.
INO1	952	1876	1,97	1,360	2,03	Truncated power law	Broad scale	Inoue, T., Kato, M., Kakutani, T., Suka, T., & Itino, T. (1990) Insect-flower relationship in the temperate deciduous forest of Kibune, Kyoto: An overview of the flowering phenology and the seasonal pattern of insect visits. <i>Contrib. Biol. Lab., Kyoto Univ.</i> 27, 377-463.
INO2	117	253	2,16	1,080	11,01	Power law	Scale free	Inouye, D. W. & Pyke, G. H. (1988) Pollination biology in the Snowy Mountains of Australia: comparisons with montane Colorado. <i>Aust. J. Ecol.</i> 13, 191-210.
KAKU	428	774	1,81	1,250	22,82	Power law	Scale free	Kakutani, T., Inoue, T., Kato, M. & Ichihashi, H. (1990) Insect-flower relationship in the campus of Kyoto University, Kyoto: An overview of the flowering phenology and the seasonal pattern of insect visits. <i>Contrib. Biol. Lab., Kyoto Univ.</i> 27, 465-521.
KATO	251	430	1,71	1,360	3,98	Power law	Scale free	Kato M. & Miura R. (1996) Flowering phenology and anthophilous insect community at a threatened natural lowland marsh at Nakaikemi in Tsuruga, Japan. <i>Contrib. Biol. Lab., Kyoto Univ.</i> , 29, 1-48.
KAT1	770	1193	1,55	1,620		Power law	Scale free	Kato, M., Kakutani, T., Inoue, T. & Itino, T. (1990) Insect-flower relationship in the primary beech forest of Ashu, Kyoto: An overview of the flowering phenology and the seasonal pattern of insect visits. <i>Contrib. Biol. Lab., Kyoto Univ.</i> 27, 309-375.
KAT2	446	865	1,94	1,260	19,95	Power law	Scale free	Kato M., Matsumoto M. & Kato T. (1993) Flowering phenology and anthophilous insect community in the cool-temperate subalpine forests and meadows at Mt. Kushigata in the Central part of Japan. <i>Contrib. Biol. Lab., Kyoto Univ.</i> , 28, 119-172.
KEVA	111	190	1,71	1,390	3,01	Truncated power law	Broad scale	Kevan, P. G. (1972) Insect pollination of high arctic flowers. <i>J. Ecol.</i> 60, 831-847.
GALA	32	27	0,84	1,760		Truncated power law	Broad scale	McMullen, C.K. (1993) Flower-visiting insects of the Galapagos Islands. <i>PanPacific Entomol.</i> , 69, 95-106.

MOSQ	29	38	1,31	1,220	1,99	Power law	Scale free	Mosquin, T. & Martin, J. E. (1967) Observations on the pollination biology of plants on Melville Island, N.W.T., Canada. <i>Canad. FieldNat.</i> 81, 201205.
HES1	108	249	2,31	1,100	5,01	Truncated power law	Broad scale	J.M. Olesen, unpublished data. Fallow, Denmark.
GARA	84	145	1,73	1,140	5,96	Power law	Scale free	Olesen, J.M., Eskildsen, L.I. & Venkatasami, S. (2002) Invasion of pollination networks on oceanic islnds: importance of invader complexes and endemic super generalists. <i>Diversity and Distributions</i> , 8, 181192.
HES2	50	79	1,58	1,450	3,01	Truncated power law	Broad scale	J.M. Olesen, unpublished data. Bog, Denmark.
HES3	50	72	1,44	1,510	1,99	NA	NA	J.M. Olesen, unpublished data. Temperate forest, Denmark.
ACOR	22	30	1,36	1,020	3,01	Truncated power law	Broad scale	Olesen, J.M., Eskildsen, L.I. & Venkatasami, S. 2002. Invasion of pollination networks on oceanic islnds: importance of invader complexes and endemic super generalists. <i>Diversity and Distributions</i> , 8, 181192.
PERC	97	178	1,84	1,000	2,98	Truncated power law	Broad scale	Percival M. (1974) Floral ecology of coastal scrub in southeast Jamaica. <i>Biotropica</i> , 6, 104-129.
PETA	797	2933	3,68	0,990	7,08	Power law	Scale free	Petanidou, T. 1991. [Pollination ecology in a phryganic ecosystem]. Unpubl. PhDthesis, Aristotelian University, Thessaloniki.
PRI1	78	120	1,54	1,440	3,01	Truncated power law	Broad scale	Primack R.B. (1983) Insect pollination in the New Zealand mountain flora. <i>New Zealand J. Bot.</i> , 21, 317333.
PRI2	180	374	2,08	1,220	3,98	Truncated power law	Broad scale	Primack R.B. (1983) Insect pollination in the New Zealand mountain flora. <i>New Zealand J. Bot.</i> , 21, 317333.
PRI3	167	346	2,07	1,110	26,10	Power law	Scale free	Primack R.B. (1983) Insect pollination in the New Zealand mountain flora. <i>New Zealand J. Bot.</i> , 21, 317333.
RAMI	93	151	1,62	1,010	5,96	Power law	Scale free	Ramirez, N. (1989) Biología de polinización en una comunidad arbustiva tropical de la alta Guyana Venezolana. <i>Biotropica</i> 21, 319330.
SCHE	40	65	1,63	1,330	3,01	Truncated power law	Broad scale	Schemske, D., Willson, M.F., Melampy, M., Miller, L., Verner, L., Schemske, K. & Best, L. (1978) Flowering ecology of some spring woodland herbs. <i>Ecology</i> 59, 351366.
Seed dispersal – Plant species								
BEEH	40	119	2,98	0,900	7,01	Truncated power law	Broad scale	Beehler B. (1983) Frugivory and polygamy in birds of paradise. <i>Auk</i> , 100, 112.

SORE	17	22	1,29	0,350	3,98	Truncated power law	Broad scale	Sorensen A.E. (1981) Interactions between birds and fruit in a temperate woodland. <i>Oecologia (Berl.)</i> , 50, 242249.
FROS	26	110	4,23	1,290	6,94	Truncated power law	Broad scale	Frost P.G.H. (1980) Fruitfrugivore interactions in a South African coastal dune forest. In: <i>Acta XVII Congressus Internationalis Ornithologici</i> (ed. Noring R), pp. 11791184. Deutsche Ornithologische Ges., Berlin, Germany.
GUIT	19	40	2,11	0,970	3,98	NA	NA	Gutián J. (1983) Relaciones entre los frutos y los passeriformes en un bosque montano de la cordillera cantabrica occidental. Unpubl. Ph. D. Thesis, Univ. Santiago, Spain.
GEN1	25	38	1,52	1,620	4,06	Truncated power law	Broad scale	Galetti M. & Pizo M.A. (1996) Fruit eating birds in a forest fragment in southeastern Brazil. <i>Ararajuba, Rev. Brasil. Ornitol.</i> , 4, 7179.
GEN2	66	147	2,23	0,940	5,01	Truncated power law	Broad scale	Galetti M. & Pizo M.A. (1996) Fruit eating birds in a forest fragment in southeastern Brazil. <i>Ararajuba, Rev. Brasil. Ornitol.</i> , 4, 7179.
KANT	32	86	2,69	1,260	18,13	NA	NA	Kantak G.E. (1981) Temporal feeding patterns of some tropical frugivores. <i>Condor</i> , 83, 185118.
WYTH	25	47	1,88	1,000	3,98	Truncated power law	Broad scale	Snow B.K. & Snow D.W. (1988) <i>Birds and berries</i> , Calton, England.
LOPE	27	75	2,78	1,130	3,98	Truncated power law	Broad scale	Tutin C.E.G., Ham R.M., White L.J.T. & Harrison M.J.S. (1997) The primate community of the Lopé Reserve, Gabon: diets, responses to fruit scarcity, and effects on biomass. <i>Am. J. Primatol.</i> , 42, 124.
SAPF	35	60	1,71	0,280		Power law	Scale free	Noma N. (1997) Annual fluctuations of sapfruits production and synchronization within and inter species in a warm temperate forest on Yakushima Island, Japan. <i>Tropics</i> , 6, 441449.
MONT	210	436	2,08	0,070	6,94	Truncated power law	Broad scale	Wheelwright N.T., Haber W.A., Murray K.G. & Guindon C. (1984) Tropical fruiteating birds and their food plants: a survey of a Costa Rican lower montane forest. <i>Biotropica</i> , 16, 173192.
CROM	80	142	1,78	0,770	2,02	Truncated power law	Broad scale	Crome F.H.J. (1975) The ecology of fruit pigeons in tropical Northern Queensland. <i>Aust. Wildl. Res.</i> , 2, 155185.
SNOW	64	234	3,66	1,170	18,13	Truncated power law	Broad scale	Snow B.K. & Snow D.W. (1971) The feeding ecology of tanagers and honeycreepers in Trinidad. <i>Auk</i> , 88, 291322.
CORR	58	148	2,55	0,130	7,94	Truncated power law	Broad scale	Pedro Jordano, unpublished data. Mediterranean montane forest, SE Spain.

HRAT	33	121	3,67	1,100	5,01	Truncated power law	Broad scale	Jordano P. (1985) El ciclo anual de los passeriformes frugívoros en el matorral mediterráneo del sur de España: importancia de su invernada y variaciones interanuales. <i>Ardeola</i> , 32, 6994.
VISO	24	65	2,71	0,770	6,94	Truncated power law	Broad scale	Herrera C.M. (1984) A study of avian frugivores, bird-dispersed plants, and their interaction in mediterranean scrublands. <i>Ecol. Monogr.</i> , 54, 123.
Pollination – Plant species								
CEP1	185	361	1,95	1,240	3,98	Truncated power law	Broad scale	Arroyo M.T.K., Primack R. & Armesto J. (1982) Community studies in pollination ecology in the high temperate Andes of Central Chile. I. Pollination mechanisms and altitudinal variation. <i>Am. J. Bot.</i> , 69, 8297.
CEP2	107	196	1,83	0,920	5,01	Truncated power law	Broad scale	Arroyo M.T.K., Primack R. & Armesto J. (1982) Community studies in pollination ecology in the high temperate Andes of Central Chile. I. Pollination mechanisms and altitudinal variation. <i>Am. J. Bot.</i> , 69, 8297.
CEP3	61	81	1,33	0,970	5,96	Truncated power law	Broad scale	Arroyo M.T.K., Primack R. & Armesto J. (1982) Community studies in pollination ecology in the high temperate Andes of Central Chile. I. Pollination mechanisms and altitudinal variation. <i>Am. J. Bot.</i> , 69, 8297.
ABIS	142	242	1,70	0,890	7,94	Truncated power law	Broad scale	Elberling H. & Olesen J.M. (1999) The structure of a high latitude plant-flower visitor system: the dominance of flies. <i>Ecography</i> , 22, 314323.
ZACK	107	456	4,26	1,360	13,86	Truncated power law	Broad scale	Elberling H. & Olesen J.M., unpublished data. Arctic tundra, Greenland.
MAUR	27	52	1,93	1,230	3,01	Truncated power law	Broad scale	Olesen, J.M., Eskildsen, L.I. & Venkatasami, S. (2002) Invasion of pollination networks on oceanic islands: importance of invader complexes and endemic super generalists. <i>Diversity and Distributions</i> , 8, 181192.
DONA	205	412	2,01	0,680	17,11	Truncated power law	Broad scale	Herrera J. (1988) Pollination relationships in Southern Spanish mediterranean shrublands. <i>J. Ecol.</i> , 76, 274287.
HOCK	110	179	1,63	0,740	6,94	Power law	Scale free	Hocking B. (1968) Insect flower associations in the high Arctic with special reference to nectar. <i>Oikos</i> , 19, 359387.
INO1	952	1876	1,97	0,620	23,04	Truncated power law	Broad scale	Inoue, T., Kato, M., Kakutani, T., Suka, T., & Itino, T. (1990) Insect-flower relationship in the temperate deciduous forest of Kibune, Kyoto: An overview of the flowering phenology and the seasonal pattern of insect visits. <i>Contrib. Biol. Lab., Kyoto Univ.</i> 27, 377463.
INO2	117	253	2,16	0,470	9,08	Truncated power law	Broad scale	Inouye, D. W. & Pyke, G. H. (1988) Pollination biology in the Snowy Mountains of Australia: comparisons with montane Colorado. <i>Aust. J. Ecol.</i> 13,191210.

KAKU	428	774	1,81	0,850	9,08	Truncated power law	Broad scale	Kakutani, T., Inoue, T., Kato, M. & Ichihashi, H. (1990) Insectflower relationship in the campus of Kyoto University, Kyoto: An overview of the flowering phenology and the seasonal pattern of insect visits. <i>Contrib. Biol. Lab., Kyoto Univ.</i> 27, 465521.
KATO	251	430	1,71	0,770	9,09	Truncated power law	Broad scale	Kato M. & Miura R. (1996) Flowering phenology and anthophilous insect community at a threatened natural lowland marsh at Nakaikemi in Tsuruga, Japan. <i>Contrib. Biol. Lab., Kyoto Univ.</i> , 29, 1-48.
KAT1	770	1193	1,55	0,620	17,78	Power law	Scale free	Kato, M., Kakutani, T., Inoue, T. & Itino, T. (1990) Insectflower relationship in the primary beech forest of Ashu, Kyoto: An overview of the flowering phenology and the seasonal pattern of insect visits. <i>Contrib. Biol. Lab., Kyoto Univ.</i> 27, 309375.
KAT2	446	865	1,94	0,790	10,00	Truncated power law	Broad scale	Kato M., Matsumoto M. & Kato T. (1993) Flowering phenology and anthophilous insect community in the cool-temperate subalpine forests and meadows at Mt. Kushigata in the Central part of Japan. <i>Contrib. Biol. Lab., Kyoto Univ.</i> , 28, 119-172.
KEVA	111	190	1,71	0,580	10,00	Truncated power law	Broad scale	Kevan, P. G. (1972) Insect pollination of high arctic flowers. <i>J. Ecol.</i> 60, 831847.
GALA	32	27	0,84	0,830	5,01	Truncated power law	Broad scale	McMullen, C.K. (1993) Flower –visiting insects of the Galapagos Islands. <i>PanPacific Entomol.</i> , 69, 95106.
MOSQ	29	38	1,31	0,900	5,01	Truncated power law	Broad scale	Mosquin, T. & Martin, J. E. (1967) Observations on the pollination biology of plants on Melville Island, N.W.T., Canada. <i>Canad. FieldNat.</i> 81, 201205.
HES1	108	249	2,31	0,920	11,01	Truncated power law	Broad scale	J.M. Olesen, unpublished data. Fallow, Denmark.
GARA	84	145	1,73	0,760	14,96	Power law	Scale free	Olesen, J.M., Eskildsen, L.I. & Venkatasami, S. (2002) Invasion of pollination networks on oceanic islands: importance of invader complexes and endemic super generalists. <i>Diversity and Distributions</i> , 8, 181192.
HES2	50	79	1,58	0,780	5,96	Truncated power law	Broad scale	J.M. Olesen, unpublished data. Bog, Denmark.
HES3	50	72	1,44	0,830	11,22	Exponential	Single scale	J.M. Olesen, unpublished data. Temperate forest, Denmark.
ACOR	22	30	1,36	1,260	3,01	Exponential	Single scale	Olesen, J.M., Eskildsen, L.I. & Venkatasami, S. 2002. Invasion of pollination networks on oceanic islands: importance of invader complexes and endemic super generalists. <i>Diversity and Distributions</i> , 8, 181192.

PERC	97	178	1,84	1,100	3,98	Truncated power law	Broad scale	Percival M. (1974) Floral ecology of coastal scrub in southeast Jamaica. <i>Biotropica</i> , 6, 104-129.
PETA	797	2933	3,68	0,890	18,30	Truncated power law	Broad scale	Petanidou, T. 1991. [Pollination ecology in a phryganic ecosystem]. Unpubl. PhDthesis, Aristotelian University, Thessaloniki.
PRI1	78	120	1,54	0,890	7,94	Truncated power law	Broad scale	Primack R.B. (1983) Insect pollination in the New Zealand mountain flora. <i>New Zealand J. Bot.</i> , 21, 317333.
PRI2	180	374	2,08	0,730	10,00	Truncated power law	Broad scale	Primack R.B. (1983) Insect pollination in the New Zealand mountain flora. <i>New Zealand J. Bot.</i> , 21, 317333.
PRI3	167	346	2,07	1,000	5,96	Exponential	Single scale	Primack R.B. (1983) Insect pollination in the New Zealand mountain flora. <i>New Zealand J. Bot.</i> , 21, 317333.
RAMI	93	151	1,62	1,240	2,98	Exponential	Single scale	Ramirez, N. (1989) Biología de polinización en una comunidad arbustiva tropical de la alta Guyana Venezolana. <i>Biotropica</i> 21, 319330.
SCHE	40	65	1,63	0,520	1,99	Power law	Scale free	Schemske, D., Willson, M.F., Melampy, M., Miller, L., Verner, L., Schemske, K. & Best, L. (1978) Flowering ecology of some spring woodland herbs. <i>Ecology</i> 59, 351366.
