

Annex AIIlBees

List of the bee (morpho)species collected in Morogoro, Tanzania, during four field trips in 2022 and 2023. They are distributed in four categories obtained by crossing two categorical variables, treatment (agroecological, “Agro”, versus conventional, “Conv”) and altitude (“High” versus “Low”): AgroHigh, AgroLow, ConvHigh, ConvLow. At the time of writing this report, field data could still not be assigned to some of the sampled bees; see column “[?]”. The last, most right column mentions the P-values (at $\alpha = 0.05$), two-tailed, obtained by Fisher exact probability tests. The (morpho)species are sorted alphabetically.

	AgroHigh	AgroLow	ConvHigh	ConvLow	[?]	Total	Fisher
Total number of specimens	1919	2388	2475	1954	89	8825	P-value
Total number of (morpho)species	101	105	97	107	13	176	2-tailed
Acunomia elephas		2	1			3	0.3333
Acunomia somalica	8					8	1.0000
Acunomia theryi	1		1			2	1.0000
Amegilla cfr. calens			1			1	1.0000
Amegilla sp.	11	8	6	4		29	1.0000
Anthidium s.l.	4	6	2			12	0.4545
Apis mellifera	326	592	556	652	5	2131	0.0000
Austronomia sp.A	8		2			10	1.0000
Austronomia sp.B		6	2	3		11	0.1818
Braunsapis bouyssoui	34	6	10	8		58	0.0224
Braunsapis cf. facialis	12	7	12	2		33	0.2409
Braunsapis cf. luapulana	9		5	2		16	0.1750
Braunsapis facialis	125	92	87	78		382	0.3515
Braunsapis foveata	1					1	1.0000
Braunsapis minutula-group	35	7	14	16		72	0.0018
Braunsapis MOR4				2		2	1.0000
Braunsapis sp.	112	84	145	43	32	416	0.0000
Braunsapis trochanterata	16	5	8	31		60	0.0001
Cellariella somalica		8		2		10	1.0000
Ceratina (Ceratina) MOR1	6			1		7	0.1429
Ceratina (Ceratina) MOR3	6	1				7	1.0000
Ceratina (Ceratina) MOR4		8				8	1.0000
Ceratina (Ceratina) MOR5	5	5	4			14	0.2208
Ceratina (Copoceratina) MOR1	1			1		2	1.0000
Ceratina (Copoceratina) MOR2	9		1	10		20	0.0001
Ceratina (Ctenoceratina) MOR1	8	6	2	3		19	0.6285
Ceratina (Ctenoceratina) MOR2	1	17		19	1	38	0.4865
Ceratina (Ctenoceratina) MOR3				1		1	1.0000
Ceratina (Ctenoceratina) MOR4		7		6		13	1.0000
Ceratina (Ctenoceratina) MOR5	2	4	1	6		13	0.5594
Ceratina (Ctenoceratina) MOR6		1		1		2	1.0000
Ceratina (Pithitis) MOR2		2		7		9	1.0000
Ceratina (Pithitis) MOR4	5		1	1		7	0.2857
Ceratina (Pithitis) MOR5				1		1	1.0000
Ceratina (Pithitis) MOR6			1			1	1.0000
Ceratina (Simioceratina) MOR1	5	11	4	27		47	0.2389
Ceratina (Simioceratina) MOR2				4		4	1.0000
Ceratina (Simioceratina) MOR3		2				2	1.0000
Ceratina sp.	238	182	183	272	16	891	0.0000
Ceratina trochanterata				1		1	1.0000
Ceylalexius muiri		19				19	1.0000
Coelioxys sp.	2			2		4	0.3333
Compsomelissa sp.	1		1			2	1.0000
Crociaspidia maculata	1					1	1.0000
Ctenoplectra albomimbata	1	3				4	1.0000
Ctenoplectra antinorii	6		2	2		10	0.1333
Ctenoplectra polita	2		1			3	1.0000
Ctenoplectra terminalis	1					1	1.0000
Dactylurina schmidtii	459	202	879	56	4	1600	0.0000
Eucara sp.			1			1	1.0000
Eupetersia emini	4			1		5	0.2000
Gronoceras cinta		12				12	1.0000
Hierlades sp.	14	22	8	9		53	0.7659
Hyaleus sp.	1	2	3	1		7	0.4857
Hypotrigona sp.	2	8	14	54		78	1.0000
Lasioglossum (Afrodialictus) af. hemicyaneus	1	1				2	1.0000
Lasioglossum (Afrodialictus) bellulum	1	1	1	1		4	1.0000
Lasioglossum (Afrodialictus) sp.4			3			3	1.0000
Lasioglossum (Afrodialictus) sp.4 "Bondwa"	1		14			15	1.0000
Lasioglossum (Afrodialictus) sp.5	1		3	1		5	1.0000
Lasioglossum (Afrodialictus) sp.5 "Moro"	11		26	1		38	1.0000
Lasioglossum (Afrodialictus) sp.6	1		5			6	1.0000
Lasioglossum (Afrodialictus) sp.7	1		2			3	1.0000
Lasioglossum (Afrodialictus) theste	2	1		3		6	0.4000
Lasioglossum (Ctenonomia) af. atricrum	1					1	1.0000
Lasioglossum (Ctenonomia) atricrum	10	4	14	2		30	0.3778
Lasioglossum (Ctenonomia) atricrum var brown	1					1	1.0000
Lasioglossum (Ctenonomia) atricrum var grey	37	19	41	29		126	0.4614
Lasioglossum (Ctenonomia) cf. atricrum var brown	3	3	2	4		12	1.0000
Lasioglossum (Ctenonomia) collegum	6		19	2		27	1.0000
Lasioglossum (Ctenonomia) nairobiicum	1	3	1	1		6	1.0000
Lasioglossum (Ctenonomia) nicolli		1				1	1.0000
Lasioglossum (Ctenonomia) scobe	3	8	7	11		29	0.6942
Lasioglossum (Ctenonomia) sp.	2		1	1		4	1.0000
Lasioglossum (Ctenonomia) sp.1			1			1	1.0000
Lasioglossum (Ctenonomia) sp.5		1				1	1.0000
Lasioglossum (Ctenonomia) sp.6	4					4	1.0000
Lasioglossum (Ctenonomia) sp.7	1					1	1.0000
Lasioglossum (Ctenonomia) sp.C	7		9			16	1.0000
Lasioglossum (Ctenonomia) transvaalense	7	7	15	12		41	0.7538
Lasioglossum (Ipomaelictus) bowkeri		1				1	1.0000
Lasioglossum (Ipomaelictus) gnium	9	4	14	6	1	34	1.0000
Lasioglossum (Ipomaelictus) haasi		1				1	1.0000
Lasioglossum (Ipomaelictus) hancocki	8	34	9	50		101	0.7880
Lasioglossum (Ipomaelictus) matopiense		2		14		16	1.0000
Lasioglossum (Ipomaelictus) michaelinus	4		8			12	1.0000
Lasioglossum (Ipomaelictus) norvali		1		1		2	1.0000
Lasioglossum (Ipomaelictus) pinnatum	37	15	28	29	2	111	0.0310

	AgroHigh	AgroLow	ConvHigh	ConvLow	[?]	Total	Fisher
							P-value 2-tailed
Lasioglossum (Ipomaelictus) sp.		2	2	1		5	0.4000
Lasioglossum (Ipomaelictus) TZ-MORO 12		1	1	1		3	1.0000
Lasioglossum (Ipomaelictus) TZ11	35	1	22	1		59	1.0000
Lasioglossum (Ipomaelictus) TZ11 bis			4			4	1.0000
Lasioglossum (Ipomaelictus) TZ12	1					1	1.0000
Lasioglossum (Ipomaelictus) TZ8	1					1	1.0000
Lasioglossum (Ipomaelictus) ufomicum	10		24			34	1.0000
Lasioglossum (Oxyhalictus) aciferum		1	1			2	1.0000
Lasioglossum (Oxyhalictus) aciferus				1		1	1.0000
Lasioglossum (Sellalictus) deceptum	4		2			6	1.0000
Lasioglossum (Sellalictus) mirifrons			1			1	1.0000
Lasioglossum calliceras	14	2	41	1		58	0.1815
Lasioglossum sp.	1		2			3	1.0000
Lasioglossum sp.C	1					1	1.0000
Lasioglossum tenuivene	2	5	3	2		12	0.5581
Leuconoma sp.	7		11	1		19	1.0000
Liotrigona sp.	12	2	7	10		31	0.0245
Lipotriches (Patellotriches) sp.		2				2	1.0000
Lipotriches (Rhopalomeissa) hylaeoides				1		1	1.0000
Lipotriches (Rhopalomeissa) sp.		26	1	4		31	0.1613
Lipotriches abulsa			2			2	1.0000
Lipotriches alberti	8		8			16	1.0000
Lipotriches armatipes		12		11		23	1.0000
Lipotriches baldocki		16				16	1.0000
Lipotriches cinerascens		108		1	14	123	1.0000
Lipotriches collaris		5				5	1.0000
Lipotriches cribrata	1					1	1.0000
Lipotriches eardleyi		9		5		14	1.0000
Lipotriches friesei		3		2		5	0.0000
Lipotriches hylaeoides	4	74	11	35	1	125	0.0033
Lipotriches rubella		1		2		3	1.0000
Lipotriches smaragdula	2	17		12		31	0.5097
Lipotriches sp.		3		1		4	1.0000
Lipotriches spinulifera	4	3	2			9	0.5000
Lipotriches tanganyicensis		12		3	1	16	1.0000
Lipotriches usambarae	24		24			48	1.0000
Lipotriches welwitschi		2				2	1.0000
Lipotriches whitfieldi		28		15		43	1.0000
Macrogalea candida	20	17	22	75		134	0.0008
Macronomia armatula	3			5		8	0.0179
Macronomia femorata		2		2		4	1.0000
Macronomia natalensis		61		13		74	1.0000
Macronomia sansibarica				21		21	1.0000
Macronomia sp.		1				1	1.0000
Maynomia sp.	3	9	1	9		22	0.5940
Megachile anthoptera	3		1			4	1.0000
Megachile rufiventris		4				4	1.0000
Megachile sp.	15	26	12	10		63	0.1922
Meliponula ferruginea			4			4	1.0000
Nomia scitula		1		6		7	1.0000
Nubenomia derema	10		3			13	1.0000
Nubenomia sp.	1					1	1.0000
Pachymelus reichardtii	5	1	1	3		10	0.1905
Pachynomia amoena	2	25	3	23	3	56	0.6687
Pachynomia flavicarpa		1				1	1.0000
Pachynomia macrotregula	16	4	13	5		38	0.7090
Pasites sp.		1		2		3	1.0000
Plebeina armata		225		34		259	1.0000
Pseudapis anthidioides		2		6		8	1.0000
Pseudapis interstitivensis		3		4		7	1.0000
Seladonia foana		1	1	1		3	1.0000
Seladonia jucunda	5	6	5	27		43	0.0917
Seladonia jucunda or africana	1	14	2	2		19	0.0970
Seladonia sp.		2		1		3	1.0000
Sphecodes sp.A		1				1	1.0000
Sphecodes sp.B				1		1	1.0000
Steganomus junodi				2		2	1.0000
Stictonomia aliceae			1			1	1.0000
Tetralonia labrosa	17	111	24	30	8	190	0.0000
Tetralonia sp.		8		1		9	1.0000
Tetraloniella sp.		1		1		2	1.0000
Thrinchostoma sjoestedti	30		14	2	1	47	0.1159
Trinomia cirita		13		5		18	1.0000
Trinomia natalensis	1	4		7		12	0.4167
Trinomia orientalis		46	1	33		80	0.4250
Trinomia sp.		3		2		5	1.0000
Trinomia triodonta		1				1	1.0000
Xylocopa caffra	1	4	2	2		9	0.5238
Xylocopa flavicollis	1	5		4		10	1.0000
Xylocopa flavoviridis	3		1	2		6	0.4000
Xylocopa inconstans	5		5	1		11	1.0000
Xylocopa nigrita	2		3			5	1.0000
Xylocopa scoleosis	1	2	1	2		6	1.0000
Xylocopa senior		4	1	3		8	1.0000
Zonalictus andersoni			1			1	1.0000
Zonalictus sp.			1			1	1.0000
Zonalictus sp. "MERU 6"			1			1	1.0000
Zonalictus sp.1	1		1			2	1.0000