

# Local diversification enhances pollinator visitation to strawberry and may improve pollination and marketability: Supplemental Material

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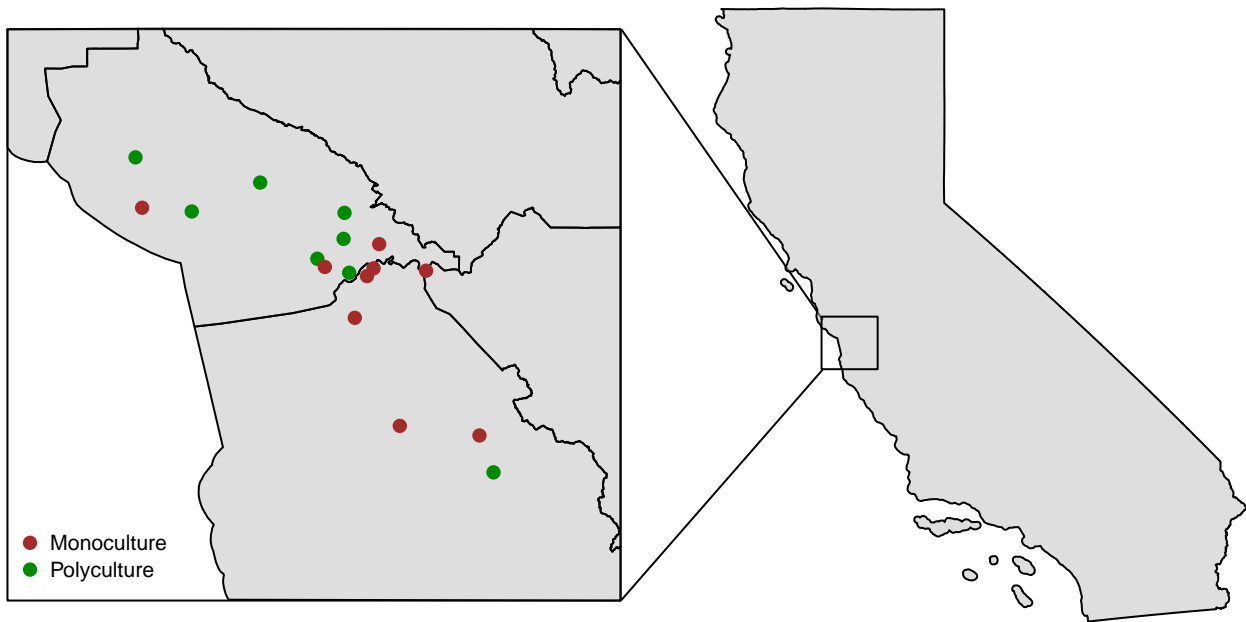
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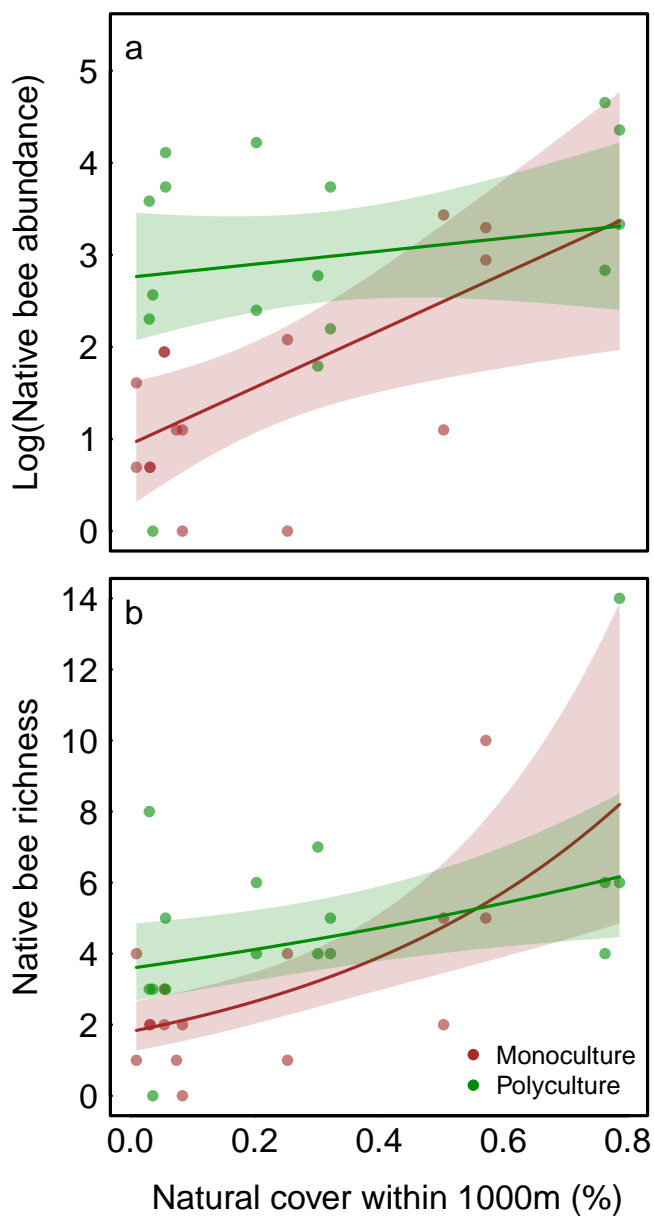
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**Figure S1.** Map of site locations, coloured by farm type. Sites were located in Santa Cruz and Monterey counties.



**Figure S2.** Abundance (a) and richness (b) of pan caught native bees. See Fig. ?? caption for details. Note that metrics for pan caught bees were not significantly different from those for net caught bees ( $P > 0.05$  for collection method) and, thus, curves here closely resemble those in Fig. ??.

Site	# Crops	Crop types	Non-crop vegetation
M1	1	strawberry	non-flowering windbreak perennial
M2	1	strawberry	none
M3	1	strawberry	none
M4	1	strawberry	non-flowering windbreak perennial
M5	1	strawberry	floral strips
M6	1	strawberry	floral strips
M7	1	strawberry	flowering hedgerow
M8	1	strawberry	none
P1	2-5	strawberry, vegetables	floral strips, flowering hedgerow, non-flowering windbreak annual, non-flowering windbreak perennial
P2	5 – 10	strawberry, cane berries, vegetables, perennial fruit, flowers	floral strips, flowering hedgerow
P3	> 10	strawberry, cane berries, vegetables, leafy greens, perennial fruit	floral strips, flowering hedgerow
P4	> 10	strawberry, cane berries, vegetables, leafy greens, row crops, perennial fruit, flowers	floral strips, flowering hedgerow
P5	2 – 5	strawberry, cane berries, vegetables, perennial fruit	none
P6	5 – 10	strawberry, vegetables, leafy greens, perennial fruit,	floral strips, flowering hedgerow
P7	> 10	strawberry, cane berries, vegetables, leafy greens, row crops, perennial fruit, flowers	floral strips, flowering hedgerow
P8	> 10	strawberry, cane berries, vegetables, leafy greens, row crops, perennial fruit, flowers	floral strips, flowering hedgerow

**Table S1.** Crop types and non-crop vegetative structures that provide food and/or nesting habitat for pollinators. Sites M1-M8 indicate monoculture sites and P1-P8 polyculture sites.

Site	Agriculture	Exurban	Grasslands	Natural Habitat	Suburban	Urban	Water
M1	0.48	0.01	0.39	0.05	0.02	0.02	0.02
M2	0.43	0.07	0.17	0.25	0.01	0.07	0.00
M3	0.80	0.01	0.02	0.01	0.01	0.15	0.00
M4	0.87	0.03	0.02	0.08	0.00	0.00	0.00
M5	0.31	0.06	0.00	0.57	0.06	0.00	0.00
M6	0.10	0.02	0.35	0.50	0.01	0.01	0.01
M7	0.65	0.07	0.10	0.07	0.04	0.00	0.07
M8	0.84	0.03	0.02	0.03	0.00	0.08	0.00
P1	0.94	0.03	0.00	0.03	0.00	0.00	0.00
P2	0.33	0.05	0.14	0.30	0.14	0.03	0.00
P3	0.12	0.04	0.07	0.76	0.00	0.00	0.00
P4	0.51	0.05	0.10	0.32	0.01	0.00	0.00
P5	0.50	0.02	0.08	0.06	0.22	0.12	0.01
P6	0.65	0.02	0.06	0.04	0.00	0.20	0.03
P7	0.05	0.06	0.08	0.79	0.00	0.01	0.00
P8	0.03	0.02	0.54	0.20	0.15	0.05	0.00

**Table S2.** Composition of habitat type surrounding sites. Sites M1-M8 indicate monoculture sites and P1-P8 polyculture sites. Values indicate the fraction of that habitat type present within a 1000 meter radius disc centered at the farm. Natural habitat is the sum total of habitat types “native planted,” “oak woodland,” “oak savannah,” “riparian forest,” “riparian scrub”, and “weedy/sparse scrub.”

Species	In nets	In pans	At P	At M
<i>Agapostemon texanus</i>	3	13	15	1
<i>Andrena barbilabris</i>	0	1	1	0
<i>Andrena chlorosoma</i>	0	2	0	2
<i>Andrena nigrocaerulea</i>	4	0	0	4
<i>Apis mellifera</i>	2348	74	1115	1307
<i>Bombus californicus</i>	1	4	0	5
<i>Bombus melanopygus</i>	1	0	0	1
<i>Bombus rufocinctus</i>	2	0	0	2
<i>Bombus vosnesenskii</i>	32	7	26	13
<i>Ceratina acantha</i>	2	0	2	0
<i>Diadasia bituberculata</i>	0	1	0	1
<i>Halictus ligatus</i>	0	1	1	0
<i>Halictus tripartitus</i>	205	189	363	31
<i>Hylaeus episcopallis</i>	0	1	1	0
<i>Hylaeus rudbeckiae</i>	5	1	5	1
<i>Lasioglossum nevadense</i>	1	5	6	0
<i>Lasioglossum (Dialictus) incompletum</i>	39	179	166	52
<i>Lasioglossum (Dialictus) sp. Ba</i>	0	3	1	2
<i>Lasioglossum (Dialictus) sp. D</i>	1	0	1	0
<i>Lasioglossum (Dialictus) sp. E</i>	0	2	0	2
<i>Lasioglossum (Dialictus) tegulariforme</i>	93	100	177	16
<i>Lasioglossum (Evyllaesus) kincaidii</i>	31	15	41	5
<i>Lasioglossum (Evyllaesus) sp. AS-EI</i>	0	2	0	2
<i>Lasioglossum (Evyllaesus) sp. B</i>	2	24	26	0
<i>Lasioglossum (Evyllaesus) sp. E</i>	5	8	11	2
<i>Lasioglossum (Evyllaesus) sp. I</i>	1	2	1	2
<i>Lasioglossum (Evyllaesus) sp. R</i>	0	5	4	1
<i>Lasioglossum knereri</i>	30	28	11	47
<i>Lasioglossum nevadense</i>	1	0	1	0
<i>Lasioglossum olympiae</i>	4	0	0	4
<i>Lasioglossum punctatoventre</i>	3	12	12	3
<i>Lasioglossum sedi</i>	1	3	4	0
<i>Lasioglossum sisymbrii</i>	0	2	1	1
<i>Megachile onobrychidis</i>	2	0	2	0
<i>Melissodes lupina</i>	0	1	1	0
<i>Melissodes robustior</i>	1	0	1	0
<i>Osmia atrocyanea</i>	0	1	1	0
<i>Osmia cyanella</i>	0	1	0	1
<i>Sphecodes sp. A</i>	1	0	1	0
<i>Sphecodes sp. B</i>	0	1	1	0
<i>Sphecodes sp. CK-SC-1</i>	1	0	1	0
<i>Xeromelecta californica</i>	1	0	0	1
Total (excluding <i>Apis mellifera</i> )	473	614	885	202

**Table S3.** Counts of collected species in nets, pans, at polyculture farms (P), and at monoculture farms (M). Cells with nonzero counts are highlighted green to facilitate visual comparison of different columns.