

Table 1. The following table shows the **average date**, in terms of growing degree days (abbreviated GDD hereafter) of *first* and *last* bloom for each plant type.

Plant Name	First Bloom Avg.	End Bloom Avg.
White Prairie Clover	1360	2100
Golden Zizia	389.2857143	1140.538462
Blue Giant Hyssop(Anise Hyssop)	1487.666667	2717.416667
Rattlesnake Master	1365.4	2346.333333
Common Boneset	1402.866667	2462.363636
Sweetscented Joe Pye Weed	1412	2280.857143
Wild Bergamot	1330.066667	2119.428571
Clustered Mountainmint	1360.571429	3025.090909
Pinnate Prairie Coneflower	1350.833333	2527.5
Swamp Verbena	1220.1	1975.2
Culver's Root	1236.769231	2135.166667
Lenten rose	59.375	397.4545455
Gold Tide forsythia 'Courtasol'	88.38888889	169.3333333
Star magnolia 'Royal Star'	106.2222222	202.3333333
PJM rhododendron	155.5454545	233.25
Koreanspice viburnum	194.4615385	364.8461538
Crabapple 'Coralcole'	235.8571429	426.8461538
Common lilac 'Charles Joly'	236.0833333	405.8888889
Chinese Lilac 'Red Rothomagensis'	239.5333333	415.8333333
Common lilac 'President Grevy'	240.4	483.7142857
Vanhoutte spirea	355.2	631.0769231
Beardtongue 'Husker Red'	672	1323.071429
Manchurian Lilac 'Miss Kim'	390.7333333	634.2
Dianthus gratianopolitanus 'Tiny Rubies'	521.5	1283.714286
Siberian iris 'Anniversary'	498.7692308	765.7142857
Hybrid sage 'May Night'	382.5833333	1258.666667
Perennial geranium 'Nimbus'	552.6428571	1980.416667
Redosier dogwood	388.25	771.25
False indigo	455.1666667	886.9090909
Leopardbane 'Magnificum'	189.3333333	457.3333333
Weigela 'Red Prince'	495.5	1268.181818
Arrowwood viburnum 'Ralph Senior'	550.6666667	985.2
Bumald spirea 'Goldflame'	593.9333333	1269.428571
Potentilla fruticosa 'Abottswood'	432.6153846	2597.4
Oakleaf hydrangea	858.5384615	1738.5
Cutleaf elderberry 'Laciniata'	798.5625	1371.357143
Purple coneflower 'Magnus'	1080.4	2611.642857
Daylily 'Raspberry Pixie'	890.0714286	1461.384615
Butterfly weed	1121.692308	2146.272727
Bee balm 'Raspberry Wine'	1113.428571	2125.076923
Garden phlox 'David'	1501.307692	2576.5
Rose-of-Sharon 'Blushing Bride'	1588.7	3052.6
Japanese Anemone 'Honorine Jobert'	2466.909091	3020
Sedum 'Autumn Joy'	2263.214286	3255.454545

Figure 1. The following chart represents the average GDD for first and last bloom. The same information is present in Table 1 above.

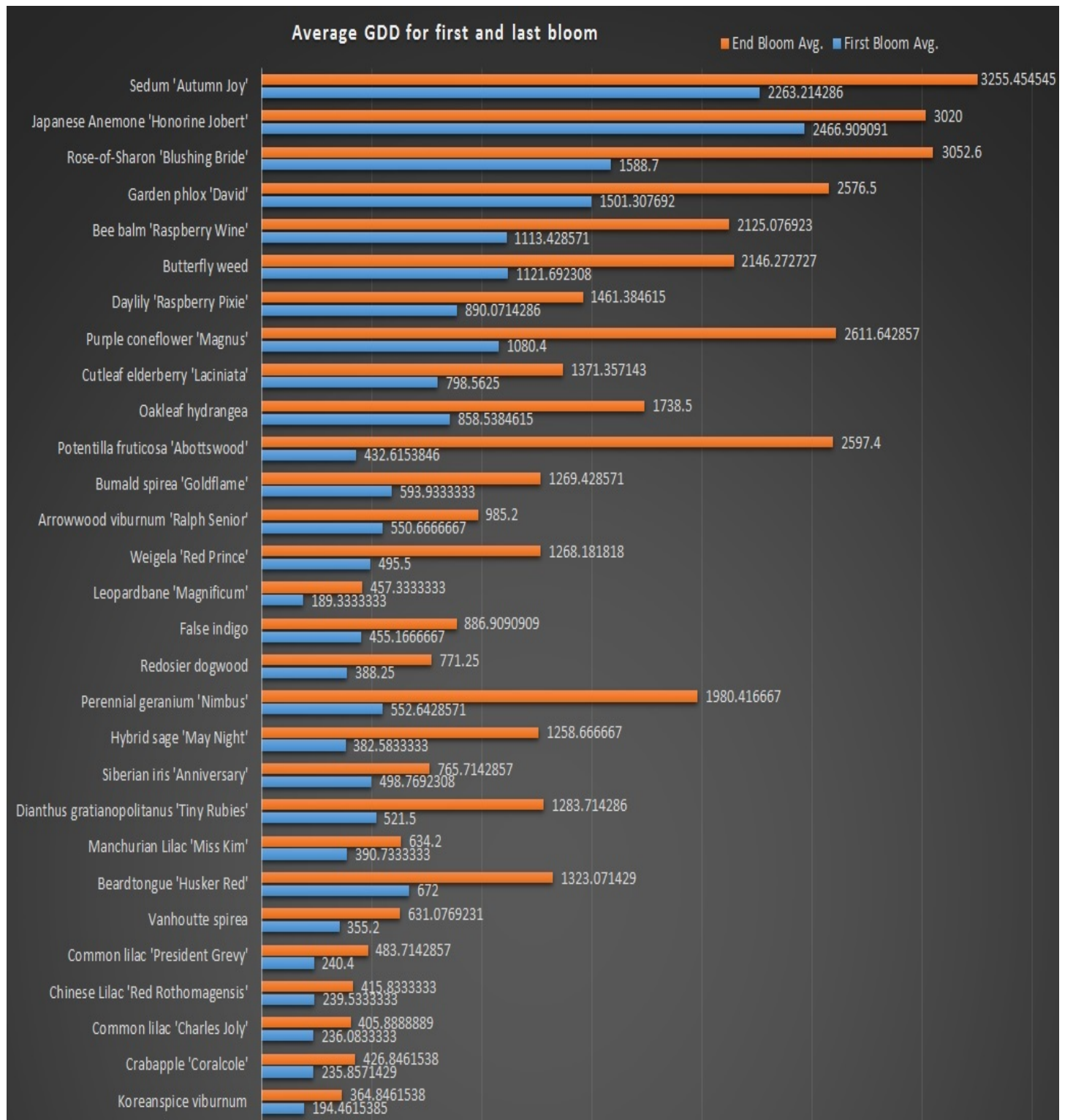


Figure 1. Continued

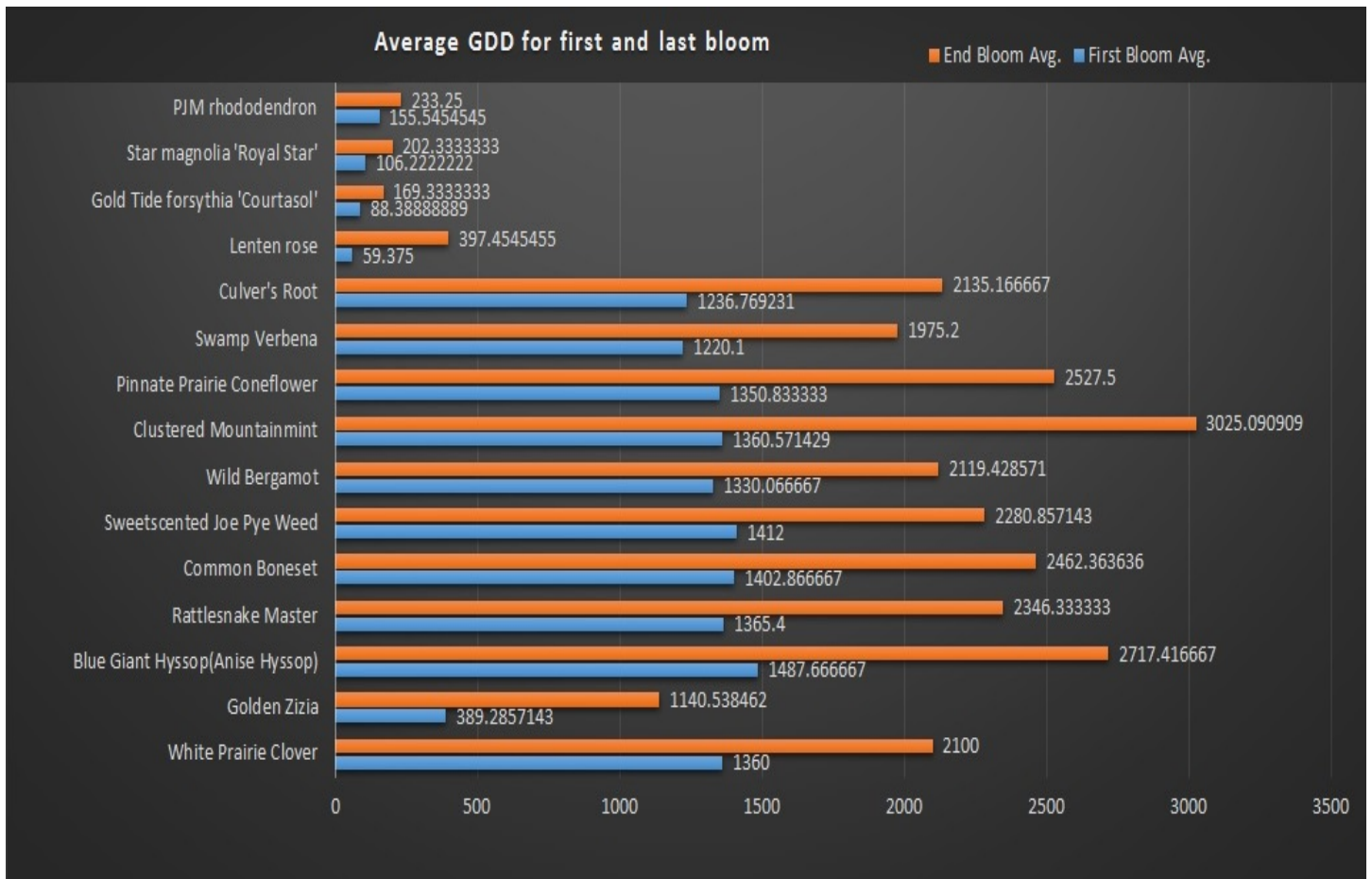


Table 2. Distribution of pollinator visitation for each plant in terms of **total** number of visits and visits by **each** pollinator species.

BB: Bumble Bee

CB: Carpenter Bee

HB: Honey Bee

OBK: Other Bee Known

OBU: Other Bee Unknown

H: Humming Bird

B/M: Butterfly or Moth

W: Wasp

F: Fly

B: Beetle

Tot Poll: Total Pollinators

PlantName	BB	CB	HB	OBK	OBU	H	B/M	W	F	B	Tot Poll
Gold Tide forsythia 'Courtasol'	0	0	1	0	0	0	0	10	21	0	32
Star magnolia 'Royal Star'	11	2	23	2	11	0	0	0	26	4	79
PJM rhododendron	3	1	0	0	0	0	0	0	3	0	7
Koreanspice viburnum	8	0	9	6	29	0	2	2	11	0	67
Crabapple 'Coralcole'	2	0	2	5	8	0	3	1	4	4	29
Common lilac 'Charles Joly'	0	0	0	0	0	0	0	0	2	0	2
Vanhoutte spirea	7	2	0	5	12	0	0	0	75	10	111
Manchurian Lilac 'Miss Kim'	2	5	45	1	2	0	0	0	16	1	72
Redosier dogwood	1	3	6	7	1	0	0	3	14	4	39
Weigela 'Red Prince'	15	4	6	6	25	1	5	0	33	0	95
Arrowwood viburnum 'Ralph Senior'	3	0	12	3	12	0	2	2	9	2	45
Bumald spirea 'Goldflame'	18	6	9	15	26	0	6	4	42	5	131
Potentilla fruticosa 'Abottswood'	9	17	23	71	111	0	14	7	114	35	401
Oakleaf hydrangea	5	2	39	5	16	0	3	4	39	37	150
Cutleaf elderberry 'Laciniata'	5	8	23	9	12	0	4	2	27	18	108
Rose-of-Sharon 'Blushing Bride'	245	39	105	122	128	7	23	3	78	135	885
Chinese Lilac 'Red Rothomagensis'	0	2	2	2	5	0	2	0	3	0	16
Japanese Anemone 'Honorine Jobert'	4	0	6	5	18	0	3	1	4	3	44
Butterfly weed	12	11	143	40	20	0	10	4	49	94	383
False indigo	13	9	11	3	4	1	4	0	5	0	50
Dianthus gratianopolitanus 'Tiny Rubies'	0	0	0	1	3	0	2	0	3	0	9
Leopardbane 'Magnificum'	2	0	0	4	2	0	0	0	0	0	8
Purple coneflower 'Magnus'	131	46	168	61	53	0	96	16	98	36	705
Perennial geranium 'Nimbus'	16	21	39	66	124	0	13	11	79	9	378
Lenten rose	0	0	2	0	1	0	0	0	16	0	19
Daylily 'Raspberry Pixie'	4	4	5	12	8	0	2	3	17	5	60
Siberian iris 'Anniversary'	0	1	2	5	1	0	0	0	18	2	29
Bee balm 'Raspberry Wine'	140	147	179	64	48	5	29	13	151	8	784
Beardtongue 'Husker Red'	14	8	17	14	10	0	1	2	14	8	88
Garden phlox 'David'	19	27	9	13	4	0	10	2	29	40	153
Hybrid sage 'May Night'	109	51	106	38	37	1	137	16	60	6	561
Sedum 'Autumn Joy'	27	52	334	47	90	0	59	13	92	77	791
Common lilac 'President Grevy'	1	0	1	0	0	0	4	3	4	0	13
Blue Giant Hyssop(Anise Hyssop)	126	71	51	35	50	0	27	17	92	15	484
White Prairie Clover	1	1	2	9	14	0	1	0	6	0	34
Rattlesnake Master	49	81	44	120	70	0	10	48	113	31	566

Common Boneset	37	41	43	130	152	2	29	79	163	69	745
Sweetscented Joe Pye Weed	109	37	31	64	83	1	38	15	90	27	495
Wild Bergamot	264	153	73	104	82	0	58	9	60	13	816
Clustered Mountainmint	219	148	830	535	276	0	37	297	279	653	3274
Pinnate Prairie Coneflower	33	12	15	49	19	0	3	0	36	7	174
Swamp Verbena	34	15	37	51	42	0	12	2	27	7	227
Culver's Root	97	40	109	102	87	0	8	8	76	26	553
Golden Zizia	6	10	29	61	28	0	3	3	60	12	212

Figure 2. The following chart represents the distribution of total number of pollinator visits for each plant. The same information is present in Table 2 above.

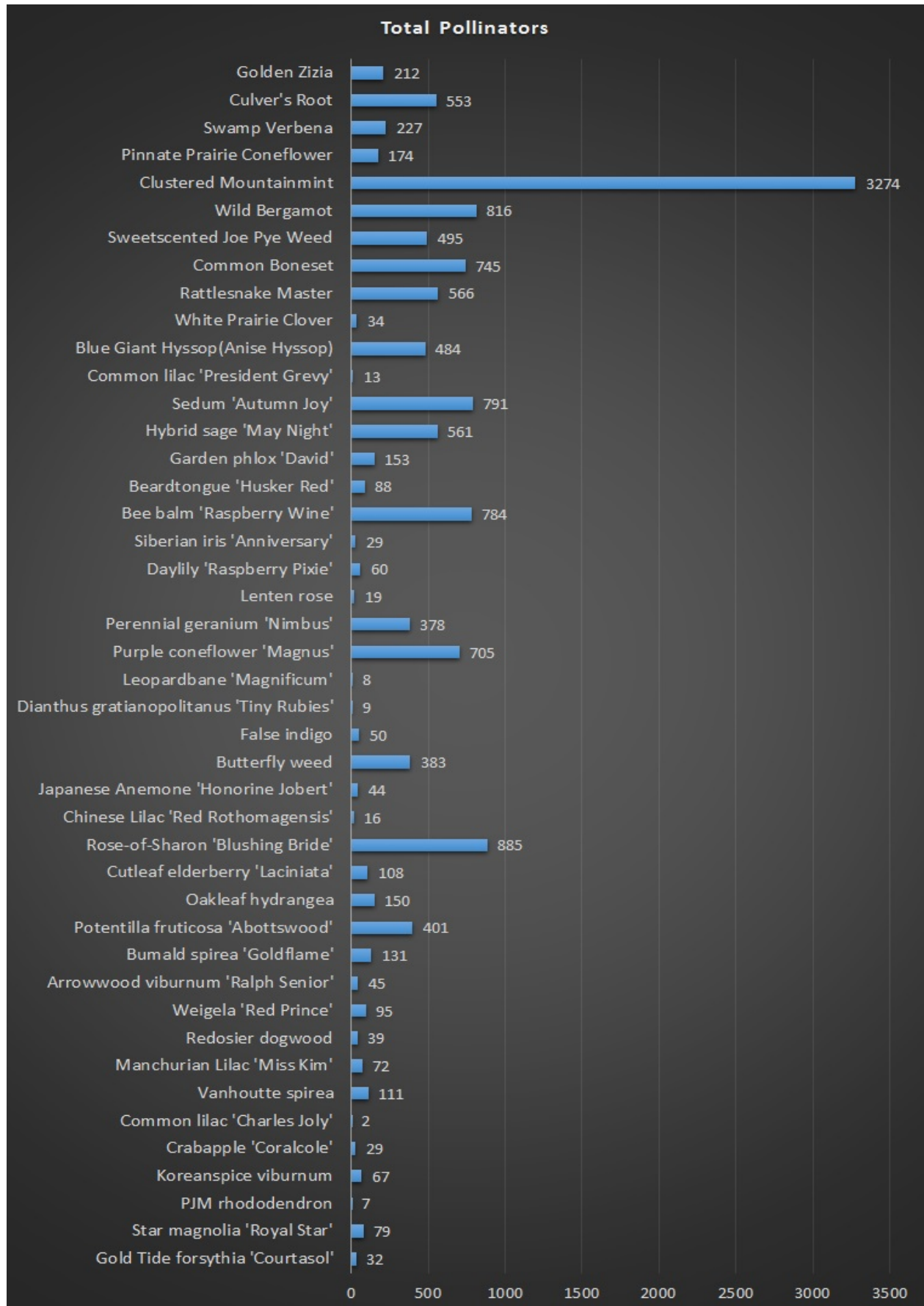


Table 3. The following table shows the **diversity** of pollinator for **each** garden and the **total** number of plant species present each garden.

BB: Bumble Bee

CB: Carpenter Bee

HB: Honey Bee

OBK: Other Bee Known

OBU: Other Bee Unknown

H: Humming Bird

B/M: Butterfly or Moth

W: Wasp

F: Fly

B: Beetle

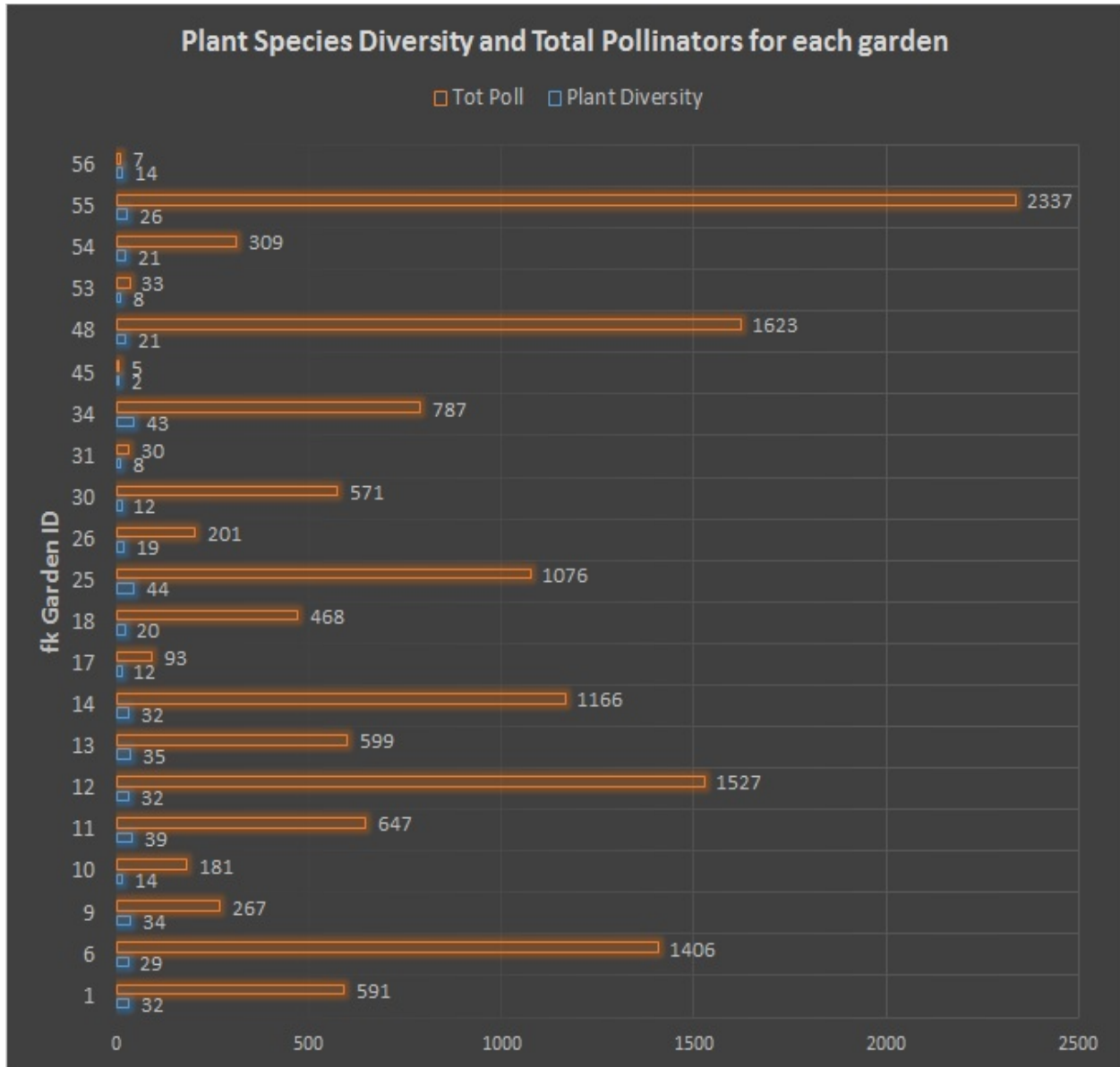
Tot Poll: Total Pollinators

fkGardenID: used to uniquely identify each garden.

Plant Diversity: total number of plants present in a specific garden

fkGardenID	Plant Diversity	BB	CB	HB	OBK	OBU	H	B/M	W	F	B	Tot Poll
1	32	67	96	139	133	45	0	19	23	19	50	591
6	29	87	12	265	42	50	1	50	61	781	57	1406
9	34	84	34	8	54	7	3	33	2	40	2	267
10	14	78	39	26	8	13	0	6	2	6	3	181
11	39	55	42	177	25	182	1	12	52	75	26	647
12	32	156	222	354	87	263	0	86	95	105	159	1527
13	35	62	14	46	54	87	1	69	17	220	29	599
14	32	180	61	367	176	48	0	93	49	132	60	1166
17	12	5	10	23	2	31	0	1	1	10	10	93
18	20	31	89	191	29	19	0	34	21	44	10	468
25	44	368	97	155	103	219	0	29	22	74	9	1076
26	19	39	0	27	64	50	0	5	2	13	1	201
30	12	214	83	39	83	66	0	19	14	24	29	571
31	8	2	1	17	1	2	0	0	3	3	1	30
34	43	24	17	142	184	109	9	60	27	160	55	787
45	2	0	0	1	2	1	0	1	0	0	0	5
48	21	81	61	234	346	16	1	10	79	4	791	1623
53	8	11	0	0	0	3	0	0	0	17	2	33
54	21	21	10	52	136	18	1	5	8	34	24	309
55	26	236	189	328	363	495	1	128	122	390	85	2337
56	14	0	0	0	0	0	0	0	0	7	0	7

Figure 3. The following chart represents the total number of plant species and total number of pollinators for each garden. The same information is present in Table 3 above.



The Pearson’s product-moment **correlation** between **Plant Diversity** and **Tot Poll** is **0.501639**.

We carry out a statistical hypothesis test of H_0 against H_1 :

H_0 : The true correlation is equal to 0 vs. H_1 : The true correlation is greater than 0, which yields a **p-value** of **0.01** (< 0.05). Thus, we can reject the null hypothesis. There is sufficient statistical evidence at the $\alpha = 0.05$ level to conclude that there is a significant linear relationship between the total plant species diversity and total pollinators in each garden.