

Supplementary file 1

Nests of *Vespa analis* used in the study. For the founding queen, its presence or absence is represented with "y" and "n", respectively. Figures in parentheses show the number of stylized individuals.

Nest #	Date	No. cells*	No. adults				Total
			Founding queen	Workers	Males	New queens	
1	1998/6/9	38	y	2(0)	0	0	2(0)
2	1998/8/12	143	y	9(0)	0	0	9(0)
3	1998/8/17	243	y	43(0)	0	0	43(0)
4	1998/8/26	305	y	31(0)	0	0	31(0)
5	1998/8/31	124	n	29(4)	8(1)	0	37(5)
6	1998/9/1	205	y	65(17)	0	0	65(17)
7	1998/9/2	137	n	14(5)	15(12)	0	29(17)
8	1998/9/4	394	y	96(0)	0	0	96(0)
9	1998/9/17	363	n	50(2)	16(2)	0	66(4)
10	1998/9/21	205	n	54(8)	0	0	54(8)
11	1998/9/25	563	y	107(4)	0	0	107(4)
12	1998/10/9	762	n	15(0)	60(5)	0	75(5)
13	1999/7/9	54	y	7(0)	0	0	7(0)
14	1999/8/6	293	n	20(0)	37(0)	0	57(0)
15	1999/9/8	802	y	186(17)	77(23)	0	263(40)
16	2000/6/26	ND	y	3(0)	0	0	3(0)
17	2000/9/11	252	n	48(3)	2(0)	0	50(3)
18	2001/7/10	121	y	11(4)	0	0	11(4)
19	2001/7/23	94	n	13(0)	0	0	13(0)
20	2001/7/23	89	y	13(1)	0	0	13(1)
21	2001/7/31	160	y	32(0)	0	0	32(0)
22	2001/7/31	100	y	8(2)	1(0)	0	9(2)
23	2001/8/2	66	n	5(1)	0	0	5(1)
24	2001/8/5	308	y	47(0)	0	0	47(0)
25	2001/8/8	98	y	17(0)	0	0	17(0)
26	2001/8/15	311	n	62(0)	0	0	62(0)
27	2001/8/26	365	y	50(0)	0	0	50(0)
28	2001/8/29	62	n	6(0)	5(1)	0	11(1)
29	2001/8/29	379	y	68(3)	0	0	68(3)
30	2001/8/29	ND	y	26(0)	0	0	26(0)
31	2001/8/30	322	y	65(3)	0	0	65(3)
32	2001/8/30	395	y	104(9)	0	0	104(9)
33	2001/9/7	474	y	74(3)	40(3)	0	114(6)
34	2002/8/20	209	y	41(1)	1(0)	0	42(1)
35	2002/8/20	367	y	83(12)	3(1)	0	86(13)
36	2002/8/26	110	n	17(1)	0	0	17(1)
37	2002/8/29	124	y	17(0)	0	0	17(0)
38	2002/9/24	ND	n	14(10)	0	0	14(10)
39	2002/9/24	ND	y	44(5)	4(0)	0	48(5)
40	2002/10/11	323	y	30(0)	29(0)	2(0)	61(0)
41	2002/10/11	368	n	16(0)	86(0)	0	102(0)
42	2002/10/16	292	y	20(0)	4(0)	16(2)	40(2)
43	2003/6/22	57	y	7(1)	0	0	7(1)
44	2003/7/14	49	n	3(0)	0	0	3(0)
45	2003/8/23	263	y	66(0)	0	0	66(0)
46	2003/8/27	314	y	45(1)	0	0	45(1)
47	2003/9/8	460	y	82(16)	2(0)	0	84(16)
48	2003/9/8	119	n	9(3)	0	0	9(3)

*ND stands for no data because of partial destruction of nests when collected.