TABLE 5. ANT SPECIES RICHNESS (NUMBER OF NATIVE ANT SPECIES) IN RIPARIAN WOODLAND SITES WITH AND WITHOUT POPULATIONS OF *I. HUMILIS*

Site	S_L	S_B	S_T	No. hypogaeic spp.	No. epigaeic spp.
I. humilis present					
1	3	3	5	4	1
5	4	1	4	2	2
6	2	1	3	2	1
7	0	1	3	0	3
9	2	1	2	1	1
10	2	0	3	2	1
12	2	1	3	1	2
15	0	1	2	0	2
16	0	0	1	1	0
20	4	1	5	3	2
Mean (± s.d)	1.9 ± 1.5	1.0 ± 0.8	3.1 ± 1.3	1.6 ± 1.3	1.5 ± 0.8
I. humilis absent					
2	3	4	7	2	5
3	4	5	11	3	8
4	4	2	9	3	6
8	2	4	10	1	9
11	10	2	11	6	5
13	6	2	9	5	4
14	3	6	10	3	7
17	4	2	7	0	7
18	10	3	12	7	5
19	5	2	6	2	4
21	3	2	6	2	4
22	5	3	6	2	4
Mean (± s.d)	4.9 ± 2 6	3.1 ± 1.4	8.7 ± 2.2	3.0 ± 2.0	5.7 ± 1.7
t-test on means					
t-statistic	3.219	4.194	7.073	1.881	6.954
probability	0.004	0.000	0.000	0.075	0.000

(presence or absence of *I. humilis*) as the grouping variable, and estimated overall disturbance as the covariate, reveals no effect of disturbance on S_T ($p \approx 0.891$), but a highly significant effect of site type ($p \approx 0.000$). This indicates that it is the presence of *I. humilis* itself, rather than site disturbance or stream flow, that is primarily responsible for the drastic decline in ant species richness in patches of riparian woodland colonized by *I. humilis*.

Litter and bait collections were designed to provide information on hypogaeic and epigaeic ants, respectively. However, ants extracted from litter include some species which also forage extensively aboveground, and at many sites some of the epigaeic species detected by general collecting methods did not come to bait. To more accurately assess the effect of *I. humilis* on these two groups of ants, each of the ant species recorded from valley riparian woodland was classified as epigaeic or hypogaeic according to the following criteria: hypogaeic species were considered to be those which occurred