TABLE 1. *Composition of ant species collected in pitfall traps. Data are numbers of species per taxon, with percent total ants per plot in brackets. Taxa are arranged into functional groups according to a generalized model of ant community organization in Australia (see text for details).*

	Plot						
	A1	A2	B1	B2	C1	C2	Total
1. Dominant species							
Iridomyrmex	6 (63)	6 (52)	7 (47)	4 (14)	1 (15)	1 (19)	11 (33)
Oecophylla	—	—	1 (<1)	—	1 (<1)	1 (<1)	1 (<1)
2. Associated subordinate Camponotini							
Camponotus, Opisthopsis + *Polychachis*	2 (<1)	3 (1)	4 (1)	—	—	3 (1)	7 (<1)
3. Climate specialists							
Monomorium ('*Chelaner*')	2 (7)	1 (4)	2 (1)	2 (4)	1 (<1)	—	3 (3)
Melophorus	3 (7)	3 (7)	3 (6)	2 (2)	1 (3)	1 (<1)	3 (4)
Meranoplus	5 (2)	4 (1)	4 (1)	1 (1)	1 (1)	1 (<1)	8 (1)
Subtotal	10 (16)	8 (11)	9 (8)	5 (7)	3 (4)	2 (1)	14 (8)
4. Cryptic species							
Aenictus, Glamyromyrmex + *Quadristruma*	—	1 (<1)	1 (1)	1 (<1)	2 (1)	—	4 (<1)
Solenopsis, Acropyga, Stigmacros, Tapinoma + *Paratrechina minutula* gp.	2 (2)	4 (3)	7 (10)	5 (23)	4 (26)	4 (14)	9 (14)
5. Opportunists							
Paratrechina	1 (<1)	—	—	1 (1)	1 (3)	1 (<1)	1 (1)
Rhytidoponera	3 (4)	5 (9)	3 (5)	2 (3)	2 (1)	—	5 (4)
Tetramorium	3 (4)	2 (3)	3 (3)	2 (5)	—	1 (3)	3 (3)
Cardiocondyla	—	—	—	1 (1)	—	—	1 (<1)
Odontomachus	1 (<1)	—	—	—	1 (<1)	—	1 (<1)
Subtotal	8 (9)	7 (12)	6 (8)	6 (9)	4 (4)	2 (3)	11 (9)
6. Generalized Myrmicinae							
Crematogaster	1 (1)	2 (1)	—	3 (1)	1 (2)	1 (2)	4 (1)
Monomorium	7 (8)	6 (17)	9 (12)	9 (31)	7 (33)	5 (50)	11 (25)
Pheidole	3 (2)	4 (4)	4 (14)	4 (13)	4 (15)	3 (9)	7 (10)
Subtotal	11 (11)	12 (21)	13 (26)	16 (46)	12 (50)	9 (61)	22 (36)
7. Large, solitary foragers							
Bothroponera + *Leptogenys*	1 (<1)	1 (<1)	2 (<1)	1 (<1)	—	—	2 (<1)
Total no. ants	807	606	772	354	375	282	3196
Total no. species	38	42	49	38	27	22	81
Mean no. species per trap	7.8	8.1	8.4	5.7	4.9	4.0	6.5
Species diversity (H^1)	0.89	1.25	1.30	1.35	1.22	0.95	1.16
Species evenness (J^1)	0.55	0.76	0.75	0.85	0.82	0.70	0.74

1984). This suggests that seasonal aridity is a major determinant of faunistic composition in the region.

Ant abundance, diversity, and composition in traps varied markedly between fire treatments. There was good separation between annually burned and unburned plots according to the ordination of trap data, with only slight overlap (Fig. 2). This separation was primarily across the first axis, where scores were similar within each burning treatment, but different between treatments (Table 2). Ordination scores on the first axis were positively correlated with the abundances of dominant *Iridomyrmex* ($r = 0.35$, $P < 0.005$), hot climate specialists ($r = 0.21$, $P < 0.05$), and opportunists (primarily *Rhytidoponera aurata*; $r = 0.49$, $P < 0.05$), and negatively correlated with the abundance of cryptic