

Table I. — Seasonal change of colony composition in *Prisomyrmex pungens* from the campus ground of Shizuoka University.Table I. — Seasonal change of colony composition in *Pristomyrmex pungens* from the *pungens* provenant du campus universitaire de Shizuoka.

Date of observation		Eggs	Larvae	Pupae		Adults	
				Male	Small worker	Male	Small worker
April 12,	1981	0	0	0	0	0	1,000 <
April 24,	1981	+	0	0	0	0	1,000 <
May 1,	1981	++	+	0	0	0	1,000 <
June 9,	1979	+++	++	0	0	0	1,000 <
July 1,	1980	+++	9,020	26	1,033	0	3,780
July 2,	1982	+++	+++	0	+++	3	1,000 <
August 1,	1980	++	1,737	0	2,993	0	5,095
September 6,	1980	0	91	0	1,416	0	10,846
November 4,	1982	0	0	0	0	0	3,814

+ = a few; ++ = several tens; +++ = several hundreds.

that in *P. pungens* a few males (2-3 %) are produced occasionally in some mature colonies during June and July.

The third author (KUBOTA) recently found some unusual colonies which included many large workers as well as the small ones described above (*fig. 1*). One of these large workers was collected in rotten wood at Nagashima. The worker size distribution is strongly bimodal, so that we can describe the "workers" as being dimorphic (*fig. 2 A*). The large workers are characterized by the possession of three well-developed ocelli (*fig. 1 E*), two pairs of ovarioles, a spermatheca (though it is more or less degenerate), and morphologically normal copulatory organs (*fig. 3 A*). In contrast, the small workers have no discernible spermatheca, and their copulatory organ is somewhat degenerate (*fig. 3 B*). These morphological characteristics suggest that the "large workers" could be described as ergatoid queens rather than true workers; following the description by TERANISHI (1923). We therefore term this category "ergatoid queen" (Qe). The frequency of ergatoid queens was 49.0 % in the Nagashima colony, but lower in other colonies, i.e., 33.3 % in the colony collected at Odawara and 3.0 % in that from Yamaguchi. We then excavated more than 50 colonies in the campus ground of Shizuoka University, but none of these had ergatoid queens. Given that the three colonies with ergatoid queens were collected over 500 km from each other, and that their distribution range includes the Shizuoka University site, with numerous colonies lacking ergatoids, it seems likely that colonies with ergatoid queens are widespread in Japan but present at low frequency.