

Table 1. Comparative measurements of *Azteca alfari* and *A. ovaticeps*. Ranges are given, followed in parentheses by median and sample size. All measurements are in mm. Characters in bold show the greatest separation between *alfari* and *ovaticeps*.

Species				
<i>alfari</i>			<i>ovaticeps</i>	
Queens				
HL	1.51–1.69	(1.63, 26)	1.51–1.72	(1.59, 19)
HW	1.24–1.43	(1.35, 26)	1.20–1.39	(1.32, 19)
SL	0.71–0.81	(0.77, 25)*	0.73–0.85	(0.80, 19)
EL	0.39–0.45	(0.43, 13)	0.37–0.42	(0.40, 13)
WL	2.55–3.05	(2.80, 25)	2.70–3.15	(2.88, 16)
CI	0.778–0.856	(0.826, 26)	0.785–0.863	(0.820, 19)
SI	0.543–0.610	(0.573, 25)**	0.589–0.669	(0.608, 19)
GTC	0–5	(0, 80)	17–>100 (Costa Rica) 2–42 (South America)	(>100, 26) (14, 11)
Workers				
HL	0.80–1.38	(1.06, 32)	0.87–1.29	(1.10, 16)
HW	0.72–1.21	(0.96, 32)	0.77–1.16	(0.99, 16)
SL	0.53–0.74	(0.64, 24)	0.58–0.75	(0.71, 16)
CI	0.858–0.942	(0.905, 32)	0.870–0.914	(0.888, 16)
SI	0.603–0.734	(0.681, 24)	0.632–0.763	(0.715, 16)
MSC	2–17	(8, 66)	10–>19	(>20, 40)

* Outlier from Panama, 0.85.

** Outlier from Mexico, 0.649.

species and are blunt to somewhat knobbed in others. *Azteca alfari* group males exhibit slightly knobbed volsellae, as do many other *Azteca* species.

Azteca male antennae are composed of a short trapezoidal first segment (scape), a globular second segment, and variably shaped segments 3 to 13. The first and second segments are largely bare, whereas the remaining segments are densely covered with short setae. There is both intra- and interspecific variation in the size and shape of antennal segments, particularly segment 3. Although the shape of the third antennal segment is used to differentiate species within the *alfari* group (see below), diagnostic male characters for the *alfari* group as a whole are unknown.

In *Azteca* males preserved in alcohol, I have often observed what appear to be large eversible sacs between the anus and tergite VIII and between tergites VII and VIII. These sacs are probably associated with glandular products (Hölldobler and Engel-Siegel, 1982). I speculate that elaboration of antennal structure and abdominal glands results from a reliance on chemical communication during courtship and mating, replacing structural elaboration of genitalia as a reproductive isolating mechanism or feature subject to sexual selection (cf. Eberhard, 1985). This could be examined through comparative studies of *Azteca* mating behavior and pheromone chemistry.

SPECIES ACCOUNTS
Azteca alfari Emery, 1893

Table 1
Figures 1, 4–9, 14–21, 28–32, 37–42, 47
Azteca alfari Emery, 1893:138; syntype workers: Jiménez, Atlantic slope, Costa Rica (Alfaro) [MCSN] (examined, one worker here designated as LECTOTYPE, remainder of nest series PARALECTOTYPES, other material excluded from type series).
*Azteca alfaro*i Emery; Emery, 1896:4 (description of queen).
*Azteca alfaro*i race *lucidula* Forel, 1899:113; syntype workers, queens, males: Trinidad (Urich); Guatemala, Retalhuleu (Stoll) [MHNG] NEW SYNONYMY (examined, one queen from Trinidad here designated as LECTOTYPE, remainder of nest series PARALECTOTYPES, other material excluded from type series).
Azteca virens Forel, 1899:115; syntype workers: Brazil, Amazonas, Pará (Göldi) [MCZC] NEW SYNONYMY (examined).
Azteca alfari subsp. *cecropiae* Forel, 1906:240; syntype workers: Brazil, Amazonas, Manaus (Göldi, Huber) [MHNG] NEW SYNONYMY (Huber series examined, one Huber worker here designated LECTOTYPE, other material excluded from type series).