

The problem is further complicated by the separation of workers, queens, and males into different amber pieces, so that most linkages across castes and sexes can only be guessed. In the case of the Dominican amber, however, I was able to solve the problem in part by the discovery of three miniature "Rosetta stones": 3 amber pieces with closely intermingled workers and males of the commonest species of *Azteca* (*A. alpha*). One of the pieces also contains a male pupa, further supporting the interpretation that the associated workers and males belonged to the same colony and were trapped during a colony emigration.

With the worker-male connection secured, I made comparisons with material representing 48 contemporary species of *Azteca* and 50 of *Iridomyrmex* (11 Neotropical, 39 Indo-Australian) in the Museum of Comparative Zoology collection, many with workers and males from the same nests. The following characters appear to hold with consistency:

1. In *Azteca* workers the mesonotum is usually moderately convex in side view and hence does not form a smooth line with the pronotum; in New World *Iridomyrmex* workers the mesonotum is only weakly convex in side view and forms a continuous line with the pronotum.

2. In *Azteca* workers the dorsal face of the propodeum is much less convex in side view than in *Iridomyrmex* workers.

3. In *Azteca* workers the petiolar node is longer than high (the reverse is true in *Iridomyrmex*) and inclined more strongly forward than in *Iridomyrmex*.

4. The occiput of *Azteca* workers is usually more deeply concave than in *Iridomyrmex* workers, although extreme species within the two genera overlap.

5. In *Azteca* males, the scape is very short, no longer than the combined second and third antennal segments, while either the second or third segment (depending on the species) is notably elongated, inflated, or both. In *Iridomyrmex* males, the antennae are more typical, with relatively long scapes and unmodified funiculi; an exception is *I. iniquus*, which has the *Azteca* antennal form.

6. In *Azteca* males the mandibles are short and triangular, lacking a well-defined masticatory border; whereas in *Iridomyrmex* males the mandibles have a well-defined masticatory border which also often bears serially arranged teeth.