

- (3) Long hind tibiae (TAI > 90).
- (4) Head and alitrunk bright red.
- (5) First funicular segment of intermediate length ( $28 < FI < 35$ ).
- (6) Low rounded petiole in lateral view.

PARATYPES: ♀♀ HL 1.75–1.88, HW 1.65–1.73, EL 0.48–0.50, SL 2.00–2.18, AL 2.95–3.13, CI 90.4–94.3, SI 121.2–129.9, FI 29.0–31.1, EI 28.4–29.0, LI 101.8–107.1, TAI 93.5–100.8 ( $n = 5$ ).

#### *Deposition of type material*

HOLOTYPE: ♂, **Tunisia**, El Guettar, 34.33°N, 8.92°E, 300 m; in Oasis, at the edge of irrigated fields under *Eucalyptus* trees, D. Agosti, 08.06.1992, sample F92039, in nest with *Cataglyphis bicolor* (MHNG).

PARATYPES: 5 ♀♀, (alates) and 14 ♂♂, same as holotype. 7 males, Tunisia, El Guettar, 34.33°N, 8.92°E, 300 m; in Oasis, at the edge of an irrigated lucerne field, D. Agosti, 08.06.1992, sample F92309, in nest with *Cataglyphis bicolor* (BMNH, CDA, CRW, MCZ, MHNG).

*C. hanna*e can be separated from all the other known species in the *bicolor* group by the above mentioned diagnostic characters, especially by the body size, the long antennal scape and hind tibiae, the low rounded petiole, and the male genitalia. *C. abyssinicus*, the only species with small females, has a much shorter scape ( $SI < 113$ ), and shorter hind tibiae ( $TAI < 85$ ); no males of this species are known. The long black hairs on the occiput of the head as seen in *bicolor* are not present in *hanna*e, and thus exclude the possibility of *hanna*e being a microgyne of *bicolor*.

Although > 1500 different samples of species of the *bicolor* complex are in our collections, and most of them from Tunisia, no further *hanna*e specimens have been collected before. The host of *hanna*e is distributed along the southern foothills of the Atlas mountains in the transitional zone from the Mediterranean to the Desert region, not reaching the Atlantic in the West and not extending into Libya (Agosti *et al.*, in preparation). Thus, *hanna*e might be more common, certainly if one considers that the southern extension of the Mediterranean vegetation during the Pleistocene reached as far south as the Saharan mountains Tassili and Hoggar (Quezel, 1965). But social parasitic ants tend to have a clumped distribution (Buschinger, 1985) and the restricted collecting area might truly reflect its distribution. Finally, these males and females were collected as alates, during a survey where > 200 nests were at least partially dug up.

The habitat was at the edge of an irrigated *Medicago sativa* field and on a sandy place in the shade of some tall *Eucalyptus* trees on the side of a track within the oasis. In this desert region, the occurrence of species of the *bicolor* group is restricted to oases.

The position of *hanna*e within the *bicolor* species group is established by the male genitalia and the funicular index of the female. More problematic, and challenging, is the sister group relationship within the *bicolor* group. A phylogenetic analysis using morphological characters of *nodus* (outgroup), *abyssinicus*, *bicolor*, *savignyi*, *viaticus* (Table 1) and the explicit enumeration procedure from the computer program Hennig86 (Farris, 1988), resulted in 3 most parsimonious trees. Subsequent successive weighting established 2 most parsimonious trees (Fig. 2). Both these trees share the sister group *hanna*e + *abyssinicus*, and support a sister group *viaticus* + (*hanna*e + *abyssinicus*). The sister group relationship of *hanna*e + *abyssinicus* is so far only supported by female characters, as the males of *abyssinicus* are unknown. However, the long antennal scape and the small size of the females of