Table 1. Coefficient of variation for head length (HL), head width (HW) and thorax length (TL) - calculated dividing the maximum value by the minimum value for each parameter in each species.

	H L	H W	T L
C. floricola	1.21	1.31	1.18
C. rosenhaueri	1.84	1.84	1.64
C. iberica	1.62	0.77	1.62
C. emmae	2.35	2.83	3.89

Table 2. Most important aspects of each parameter, measuring 75 specimens belonging to the two colour types. (HL= head length, HW= head width, SCL= scape length, TL= thorax length, FL= femur III length, CI= cephalic index, SI= scape index. In mm.)

	Mean	St. Dev.	Mínim.	Maxim.
HL	1.262	0.064	1.150	1.400
HW	1.186	0.060	1.025	1.350
SL	1.486	0.050	1.350	1.625
TL	2.038	0.068	1.850	2.200
FL	2.027	0.069	1.850	2.275
CI	94.031	3.117	74.545	98.182
SI	125.513	5.789	111.111	148.780

forms (Tab. 3). There are also significant morphological differences between nests of the same type of colouration, e.g. nests H4B, HRB and H5B, where all the ants are bicoloured. Conversely, differences between nests of different types do not occur in all the cases (Tab. 3). Similar results were obtained by PLAZA (1987) with a biometric comparison of *C. iberica* and *C. rosenhaueri*.

We also obtained similar result for sexuals, and despite the small number studied, we maintain our belief that the differences are not exclusive to any type of colouration (Table 4).

Both forms have been detected in a relatively limited area, the Doñana National Park and the dunes between Matalascañas and Mazagón. On this geographical scale these two types might be considered to be sympatric; however, on a more reduced scale the two forms do not co-exist and do not appear to be mixed. This spatial separation could be attributable to a speciation process. Another possibility is that microclimatic factors could cause the development of this dual colouration.

Phylogenetic relationship

The main problem in the genus *Cataglyphis* is in differentiating the species level. Nevertheless, the separation between species-group is easier (see AGOSTI, 1990).