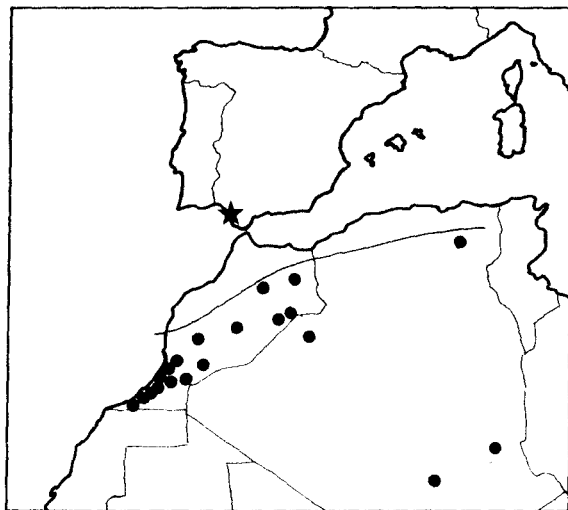


cause errors in classification. Nevertheless, the type of sagitta (punctuated discoidal with a curved serrate edge and with wide-based teeth), the finger-like process at the base of the stipites and the elongated lacinia and volsella, are practically identical to those of *C. emmae*, a species which we consider closely related to *C. floricola*. Especially the tip of the sagitta and the stipes differentiate *C. floricola* from any others cited above (Fig. 4), whereas the workers of these species bear a certain resemblance.



Map 1. Distribution of *C. emmae* (●) and of *C. floricola* nov. sp. (★).

Despite the close phylogenetic relationship between *C. floricola* and *C. emmae*, there are striking differences in their geographical distribution. *C. emmae* is known from the south of the Atlas Mountains, Saudi Arabia and Pakistan (AGOSTI, 1990). In North Africa this species lives in the wet valleys south of the Moroccan Atlas Mountains and the Tellian Atlas (Map 1), although to the west it reaches the coastal dunes south of Agadir (DELYE, 1962; DELYE & BONARIC, 1973a and b). The brachyptery and aptery of *C. floricola* female suggest that it is a more recent species than *C. emmae*, descending from the latter or from some common ancestor. The monomorphism could also be a derived character given the strong dimorphism that exists in *C. emmae* or in *C. bombicynus*, two closely related species. This monomorphism may have been produced by a dropout of one of the segregated caste of a polymorphic ancestor (WILSON, 1978, p. 134). The possibility of a more recent origin of *C. floricola* is strengthened by the fact that the area currently occupied by this species is of very recent post-orogenic sedimentary origin, having formed the line of coastal dunes in the recent Quaternary, about 40,000 years ago during the Würm III (VELA, 1984) and forming in the last 2,000 years the "Lacus Ligustinus" of the Romans, where the Doñaña National Park is located (MENANTEAU & CLEMENTE, 1977).