

towns, farms, parks and forestry plantations, where water is no longer a confining factor to life.

UAE has long been a centre for trade in the Middle East and many arthropods have probably entered the country on imported goods. Live plants arrive by road from Lebanon, Iraq and Jordan and by sea from Iran, Pakistan and India (Khan, 1983). The increase in urban development and irrigated areas has also encouraged associated arthropods, probably at the expense of the local desert fauna. Knowledge of the ecology of the UAE is scant (Satchell, 1978) and the fauna, particularly invertebrates, is poorly documented (Tigar, 1996). In 1993 only 14 species of ants were known (Tigar & Collingwood, 1993), although over 70 species of ants have now been recorded (D. Agosti, B. Tigar & C. Collingwood, unpublished data). Most of the endemic Arabian ants are described and illustrated in Collingwood & Agosti (1996). However in UAE, introduced and tramp species contribute an unusually high percentage of local ants. Tramp ants are of particular concern because they are very invasive. Here we describe and characterize these introduced species and discuss their impact on man and the local ecosystem.

Material and methods

A survey of the ant fauna was undertaken in February and March 1995. Samples were collected from all major habitats in the UAE, including open desert, desert margins, mangrove, urban areas and irrigated parks, gardens, oases and arable land. The localities visited and collection details are listed in Table 1. Voucher specimens are kept at the American Museum of Natural History (New York, U.S.A.), the National Avian Research Center (NARC) (Sweihan, UAE) and in the private collection of C.A. Collingwood (U.K.).

Results

Fifteen introduced ant species, representing four families, were found and are listed in taxonomic order below. Descriptions of their worldwide and local distributions, biology, ecology and pest status are given. They include five species, *Solenopsis geminata* (Fabricius, 1804), *Tetramorium bicarinatum* (Nylander, 1846), *Iridomyrmex anceps* (Roger, 1863), *Linepithema humile* (Mayr, 1868) and *Camponotus compressus* (Fabricius, 1787), not previously recorded in Arabia.

Ponerinae

Pachycondyla sennaarensis (Mayr, 1862) (Local name: 'Samsun' ant)

Distribution. This is an African savanna species known from Arabia for the last 100 years. It is now spreading rapidly into most human settlements (Collingwood, 1985), and is found along all major road-side developments, oases, plantations and urban areas of UAE.

Biology and ecology. An aggressive ant with a painful sting, and a body length of 4–6 mm. It is a scavenger feeding on food refuse and arthropods. New colonies form rapidly and alate queens are probably attracted to artificial lights. Humid soil conditions are needed for nest building and the irrigation of road-side plantations, gardens and parks seems especially conducive to the spread of this species. Nests are very common in urban areas where they pose a potential health hazard. In Al Ain in