Colour and size are unreliable taxonomic characters for separating closely related species of crickets. and the species of the domesticus group are remarkably uniform in their outward appearance. among the male specimens from various parts of the world, identified as Acheta domesticus by Chopard. Uvarov, Dirsh, Kevan, Gurney and other specialists, I have found no less than five species which have no significant external morphological differences but can be clearly separated on the basis of their internal male genitalia. Indeed, two of these species have been experimentally shown to be reproductively isolated. but the anatomical reasons for this have only now become clear.

The first step to clear the confusion regarding the taxonomy of the house cricket is to fix the name Acheta domesticus L. for one of the five species distinguished in the course of the present studies. The name A. domesticus, described from Sweden, should be restricted to the house cricket commonly found in Europe and North America, including the Canadian strain². The males determined on the basis of genitalia were compared with domesticus specimens from Sweden, and both sexes taken from the same laboratory-bred stock are being re-described.

Uvarov¹ described on the basis of colour and size Acheta meridionalis from Khartoum as a sub-species of A. domesticus, and Kevan³ considered it a wild southern form of the same, but the examination of male genitalia shows that A. meridionalis (Uvarov) is a distinct species, known to me also from West Aden Protectorate, Egypt and Fezzan. The examination of the male genitalia shows also that the species referred to earlier as the Pakistani strain² is Acheta hispanicus Rambur, which I am able to record also from Morocco, Baghdad and West Pakistan. Three more distinct species of the domesticus group are known to me from Egypt. East Africa and India.

The specimens of all the species referred to above are preserved in the British Museum (Natural History), London, and their full descriptions, including a re-description of Acheta domesticus L. with full synonymy, are ready for publication. Once the identities of the species previously confused with A. domesticus are established, it may become possible to build up a better picture of the distribution of the European house cricket (A. domesticus), and to determine its native country with greater certainty. The correct identification of these species is also of great economic importance as at least two of them (A. domesticus and A. hispanicus) are serious pests of irrigated crops in the Indo-Pakistan sub-continent4, and with the extension of canal irrigation in the arid and semi-arid regions their potential danger continues to increase. I shall be glad to receive material on these crickets either from houses or collected in the field for further studies.

This work was carried out while I held a research fellowship of the South East Asia Treaty Organization and I am grateful for it, and also to Sir Boris Uvarov and Dr. V. M. Dirsh for their advice and help.

A. S. K. GHOURI

Department of Plant Protection, Government of Pakistan.

Karachi.

¹ Uvarov, B. P., Entom. Mon. Mag., 57, 138 (1921). ² Ghouri, A. S. K., and McFarlane, J. E., Psyche, 34 (1), 30 (1957).

³ Kevan, D. K. McE., Entom. Mon. Mag., 91, 263 (1955). Ahmad, T., and Ghouri, A. S. K., Agric. Pakistan, 3 and 4, 235 (1953).

Africa or south-western Asia¹. However, during my work on Acheta domesticus and related species. I have found evidence which suggests that the question regarding the native country and distribu-

Home and Distribution of the House Cricket

Acheta domesticus L.

believed to have moved into Europe and North

America from arid and semi-arid areas of northern

The house cricket. Acheta domesticus, is generally

tion of A. domesticus is more complicated.