NOTE

First Record of the Turkestan Cockroach, *Blatta lateralis* (Walker), in Georgia (USA)[1]

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The Turkestan cockroach, *Blatta lateralis* (Walker), is native to Libya eastward through the Mideast and Central Asia as well as Pakistan, Iran, Iraq, Israel, Egypt, Turkey, Saudi Arabia, and the Sudan (Spencer et al. 1979, Pest Control 47(12):14,45). This cockroach was first recorded in the U.S. in 1978 where it had infested several storage buildings and a dining facility at the Sharpe Army Depot, Lathrop, CA (Carnuba, 1979, Pest Control 47(12):16,18,44). It is commonly accepted that the introduction of this species was by way of military cargo and household goods shipments from Turkey, Iran, Saudi Arabia, or Israel (Spencer et al. 1979, Pest Control 47(12):14,45). Since then it has been found in other CA locations and its range has expanded eastward, being recorded in Arizona, New Mexico, Texas, and now Georgia.

The Turkestan cockroach can be found in various habitats including cultivated areas, mountainous regions, deserts, semidesert locations, and urban areas. In the latter, it can be found in warehouses, steam tunnels, water meter boxes, potted plants, tree holes, compost piles, drop ceilings, and particularly in sewer systems. This wide range of habitats would be an important factor when considering the possibility of this species becoming a pest in the United States. Within its native range, the Turkestan cockroach is commonly found in human habitations characteristic of the regions and is one of the more important domestic species (Cochran, 1999, Document WHO/CDS/CPC/WHOPES/99.3. World Health Organization Geneva. 83 pp). It has also been demonstrated that this species is capable of transmitting two *Shigella* spp., which are causative agents of dysentery (Artyukhina and Sukhova, 1972, Med Parazitol Parazitarn Bolezni 41:49 - 53).

Adults are highly dimorphic with males being 14 - 23 mm in length with fully-developed, brownish-yellow wings that extend beyond the tips of the cerci. The forewings are marked with a translucent area near the costal vein which extends about one-third the length of the wing. The pronotum is tan with translucent margins. Females are

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larger (19 - 25 mm), dark brown-to-black with reduced, triangular wings that have a pale stripe near the costal vein that extends to the middle of the wing (Olson 1985, Bull. Entomol. Soc. Am 31:30). The male Turkestan cockroach closely resembles the American cockroach, *Periplaneta americana* (L.), and the female Turkestan cockroach looks similar to the oriental cockroach, *Blatta orientalis* (L.); therefore, they can be misidentified as such (Gulmahamad, 1993, Pest Contr. Tech. 21(10):112 - 151) and go unnoticed in the native population.

The Turkestan cockroach is a slow-reproducing cockroach that is primarily nocturnal (Gulmahamad, 2004, PCT 32(55):72 - 80). Mating has been observed in the field and appears to follow the typical cockroach-mating pattern according to Gulmahamad (1993, Pest Contr. Tech. 21(10):112 - 151). Kapanadze (1971, Med Parazitol Parazitarn Bolezni 40:595 - 600) reported that under insectary conditions the minimum developmental time was 118 days at 30° to 35°C, and maximum survival ranged from 18° to 40°C. Maximum fertility and embryonic development took place at 30°C. Sex ratio was 1:1, and males reached maturity and died faster than females.

A male Turkestan cockroach was collected inside a brick office building on 8 July 2005 at Fort McPherson, Fulton Co., GA (N33.712° W84.436°), and a female carrying an ootheca was collected outside on a brick wall of the same office building on 28 September 2006. Identification was confirmed by Cecil Smith, University of Georgia Museum of Natural History, Athens, GA. This is the first record of this species in Georgia. The extent of the presence of the Turkestan cockroach at Fort McPherson and the surrounding areas is unknown. Further investigations would have to be done to determine more information on their population size and origin. Fort McPherson is a military facility with soldiers frequently traveling to and from countries in the Middle East and Asia where the Turkestan cockroach is native.