

New records for *Blatta lateralis* (Walker 1868) (Blattaria: Blattidae) in California

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Scientific Note

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The Turkestan cockroach, *Blatta lateralis* (Walker 1868), reportedly thrives in a variety of natural and altered habitats including mountainous, desert and semi desert, agricultural, and urban areas. In urban settings, Turkestan roaches have been observed in warehouses, steam tunnels, water meter boxes, potted plants, tree holes, compost piles, drop ceilings, and sewer systems (Cobb & Petersen 2009). While it was said to be one of the more prevalent house infesting species within its range (Spencer et al. 1979), more recent evidence suggests Turkestan roaches prefer outdoor environments and only occasionally invade buildings (Rust & Reiersen 2007). Our observations support this, as we have found them only in garages and compost piles in urban areas of Central California.

Information regarding *B. lateralis* is sparse in the literature, but it appears to have been introduced multiple times on military equipment returning from the Middle East. It is endemic to North Africa from Libya eastward through the Mideast and Central Asia (Robinson 2005). The first record of *B. lateralis* in the Western Hemisphere was in May 1978 from an army depot in Lathrop, California. It was subsequently found a year later at Fort Bliss near El Paso, Texas (Spencer et al. 1979). More recently, Turkestan cockroaches have been detected in Fort McPherson in Georgia, Texas, Arizona, and New Mexico (Cobb & Petersen 2009).

While examining insect collections submitted by biology students at San Jose State University (SJSU), it was noticed that two collections contained cockroach nymphs superficially resembling the Oriental cockroach, *Blatta orientalis* L., but with coloration yellowish-red anteriorly and dark brown posteriorly as opposed to uniformly black. Additional adult specimens collected by students at their homes in the cities of Vallejo and Los Banos, were used to confirm their identification as *B. lateralis*. This discovery prompted us to investigate the current distribution of this species in California using museum and university reference collections, internet resources, and queries to urban pest experts in each county.

While we found no specimens through museum inquiries, we did identify tentative *B. lateralis* locale data via web search inquiries including Bugguide.net (under the synonym *Shelfordella lateralis*). Website contributors posted photos of what appeared to be adult and nymphal *B. lateralis* from the following locales: Long Beach, Los Angeles County, 29 December 2009 (nymph); Adelanto, San Bernardino County, 1 August 2011 (1♀, 1♂); and Palmdale, Los Angeles County 24 August 2011 (1♂). Our specimens were collected from the following cities: Vallejo, Solano County, 19 May 2012 (1♀, 1♂ and 1 nymph) and Los Banos, Merced County, 24 March 2012 (1 nymph) and 15 May 2012 (5♀, 5♂ and 5 nymphs). Two very recent collections were made in Bakersfield (Kern County) on 24 March 2013 and Porterville (Tulare County) on 27 April 2013. Both collections were single nymphs. These specimens have been deposited in the J. Gordon Edwards Entomology Museum at SJSU. Additionally, inquiries with local pest control companies, pesticide vendors, and urban entomologists revealed that the

Turkestan cockroach has been observed in Fresno, Sacramento, and Riverside (Hemet, Menefee, and Riverside) counties.

In conclusion, it appears that *B. lateralis* may be established in 9 California counties from its introduction point in Sacramento County south into Southern California, which corresponds to its preference for hot, arid habitats. It is possible that this species is much more widespread but remains unrecognized because females superficially resemble *B. orientalis*, while males may be confused with *Periplaneta americana* L. As *B. lateralis* appears to occupy similar habitats to that of *B. orientalis* in California, it remains to be seen if interspecies competition has future effects on the distribution of these two species.

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