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Authors: Llinas, Jorge, and Jiménez, María Luisa

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SHORT COMMUNICATIONS

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First Record of a Louse Fly, *Stilbometopa impressa* (Bigot), and New Host for *Microlynchia pusilla* (Speiser) (Hippoboscidae) From the Cape Region, Baja California Sur, México

Jorge Llinas and María Luisa Jiménez, División de Biología Terrestre, Centro de Investigaciones Biológicas del Noroeste, Sociedad Civil, Apartado Postal 128, La Paz, Baja California Sur, 23000, México

ABSTRACT: Nine of thirty California quail (*Callipepla californica achrustera*) captured in autumn of 1992, 17 km west of La Paz, Baja California Sur, México, were parasitized by louse flies. We identified eight *Microlynchia pusilla* and three *Stilbometopa impressa* from 30 quails in the ratio of 2.75:1. These are the first records of *S. impressa* for Cape Region and the first time either fly has been reported from the California quail in Baja California Sur.

Key words: Hippoboscidae, louse flies, *Callipepla californica, Microlynchia pusilla, Stilbometopa impressa.*

Louse flies (Diptera: Hippoboscidae) are hematophagous parasites of birds and mammals (Metcalf and Flint, 1976) including domestic and wild birds (Bequaert, 1955; Maa, 1969; McClure, 1984), as well as sheep, donkeys, horses, and wild mammals of the families Bovidae and Cervidae (López, 1988).

Hippoboscid flies are represented by 19 genera and 150 species distributed mainly in the tropics and subtropics of the world (López, 1988). Eleven genera comprising 21 New World species, and eight Old and New World species have been recorded from México (López, 1988). Many species are poorly studied; *Microlynchia pusilla* has been reported on white-winged doves (*Zenaida asiatica*) from Baja California Sur (Cape Region), crissal thrashers (*Toxostoma dorsale*) from Sonora, and mourning doves (*Zenaida macroura*) from Clarión Island in the Mexican Pacific Ocean. This fly also was reported from Yucatán on one unknown host (Bequaert, 1955) and has been found on cattle egrets (*Bubulcus ibis*) from the State of México and Tlaxcala (López, 1988). *Stilbometopa impressa* has been recorded from Sonora as a parasite on elegant quail (*Callipepla douglasii*) (Bequaert, 1955) and from Campeche on zenaida doves, (*Zenaida aurita*) (López, 1988).

During research on the food habits of the California quail (*Callipepla californica achrustera*) at the Cape Region, 30 quail (15 females and 15 males) were captured from 27 November to 10 December 1992 in fall traps (Mills and Ryder, 1979) at El Comitán (24°10′N, 110°26′W), 17 km west of La Paz; this area was described by Domínguez (1992). The Cape Region is located at the southern tip of Baja California and is the wettest site on the peninsula. Moist weather favors California quail populations, which are bigger at the Cape Region than other dry parts of the peninsula (Llinas, 1992).

Each captured California quail was placed in a cotton cloth bag and weighed with a coiled spring scale. Most louse flies were captured by hand on the axillary region of the birds, without use of any delousing agent; no other ectoparasites were found. The birds appeared healthy and unaffected by the parasitism. Because of the degree of stress to the birds from being handled, we deloused only 13 individuals of the 30 California quails captured prior to 10 December. Lice from the remainder were collected between until 15 December 1992 and January 1993. California quail not deloused were placed in separate wire mesh cages. All louse flies were stored individually in 70% ethyl alcohol and identified by Guadalupe López, fol-

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lowing the descriptions of Bequaert (1955) and Maa (1969). The specimens were deposited at the Entomological Collection of the Centro de Investigaciones Biológicas del Noroeste, La Paz, Baja California Sur, México.

Eight *M. pusilla* and three *S. impressa* were collected from nine (30%) of the 30 quail. The mean number of louse flies per host was 1.2 (SD = 0.4; range 1 to 2) individuals/host. From five female quail, we collected three *M. pusilla* and two *S. impressa*. Four male quail had five *M. pusilla* and one *S. impressa*. The abundance of *M. pusilla* and *S. impressa* on *Callipepla californica achrustera* of El Comitán (11 louse flies on 30 birds) was greater than that reported by McClure (1984) for California quail (*C. californica californica*) from the south of California (USA) (five louse flies *S. impressa* and *M. pusilla* on 34 birds) using similar methods.

Stilbometopa impressa may have been scarce because our collections were made after the infestation reached its peak in August, September and October (Bequaert, 1955). Nevertheless, these numerical differences in our results may reflect the natural abundance of each species: *M. pusilla* has been collected in 17 genera of birds from the United States to Chile, whereas *S. impressa* is confined to the southwestern United States and México and has been recorded from only five genera of birds (Bequaert, 1955; Maa, 1969). *Microlynchia pusilla* may be more abundant than *S. impressa* because it infests a larger variety of host species. Our report is the first record of these louse flies as parasites of the southern subspecies of the California quail, and the Cape Region is added to the *S. impressa* host range.

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