Chrysolampis mosquitus (Ruby Topaz)

Family: Trochilidae (Hummingbirds)
Order: Trochiliformes (Hummingbirds)
Class: Aves (Birds)

Fig. 1. Ruby topaz, *Chrysolampis mosquitus.*

[http://www.oiseaux-birds.com/card-ruby-topaz-hummingbird.html, downloaded 5 March 2017]

TRAITS. *Chrysolampis mosquitus* is about 8.1cm long including its tail, and weighs 3.5-5g (Wikipedia, 2017). The colour of this hummingbird's plumage varies from a dull blackish-brown to a radiant iridescence, depending on lighting conditions. The adult males have iridescent green to dark brown upper plumage, with a ruby-red crown leading down to the back of the neck and a shiny golden throat (Fig. 1). The females are not as bright and colourful as the males, with bronze to green upper plumage and light grey below, a dark stripe at the chin, and the tail is chestnut with a white tip (Fig. 2). *Chrysolampis mosquitus* that are native to Trinidad and Tobago, however, have a greenish-orange stripe from the chin to the chest.

DISTRIBUTION. *Chrysolampis mosquitus* are distributed mainly in the Lesser Antilles and South America (Fig. 3) from Colombia, Venezuela and Guyana, south to central Brazil and northern Bolivia, also from Colombia into southern Panama (Schauensee, 1996; Wikipedia, 2017).

HABITAT AND ACTIVITY. Mostly found in open areas like clearings, open country areas and gardens. They actively forage during the day among shrubs or tree tops. They may also be seen along hillsides from sea-level up to 1700m, but usually below 500m (Wikipedia, 2017).

FOOD AND FEEDING. *Chrysolampis mosquitus* typically thrive on nectar from a range of blossoms. The flowers are mostly highly coloured with a strong aroma. They also feed on nectar from trees, shrubs, epiphytes and cacti. However, they prefer the flowers of the samaan tree and the *Ixora* plant since these flowers have a high sugar content (Howard, 1989). When feeding, the ruby topaz hovers forward and backwards in place (Fig. 2). They do not always hover while feeding; sometimes they hang on to the flowers (Schuchmann and Kirwan, 2017). Occasionally, *Chrysolampis mosquitus* would visit humming bird feeders for sugar water or drink from bird baths, hovering to sip the water; they seldom perch on the edge of the bird bath. They often feed on small insects and spiders by hawking in the air or foraging in foliage for arthropods. These insects provide proteins during the breeding season to allow for proper growth of their young. Females can catch up to 2000 insects a day while nesting (Schuchmann and Kirwan, 2017).

POPULATION ECOLOGY. Their movements are not yet quite understood, but *Chrysolampis mosquitus* is a seasonal migrator. They migrate from north to south within Brazil. In Guyana, Venezuela and Colombia, its route of migration is along the coast from east to (Schauensee, 1996). Migration patterns are even observed on Trinidad and Tobago (Ffrench, 1991).

REPRODUCTION. The breeding season depends on the distribution of the hummingbird. December to June is the breeding season in Trinidad and Tobago, Venezuela and Guyana, while September to January is the breeding season elsewhere (Schauensee, 1996). This species does not pair bond so the males are only involved in the mating with the females. The mating process starts when the male *Chrysolampis mosquitus* performs a courtship display to catch the eye of a female (Fig. 4). The male revolves around a female of interest and displays its brilliant colours by expanding the chestnut tail and raising the ruby-red crown feathers. After mating, the male separates from the female; leaving the female to choose the location for the nest, build the nest and raise the chicks. The females will build the nest 1-4m above ground with soft plant fibres and other sticky material in order for it to expand while the size of the chicks increases. Up to 16 days is needed to incubate the three tiny white eggs. When the chicks are about 19-22 days old, they leave the nest. The chicks would be able to breed in their second year of life. Female *Chrysolampis mosquitus* raise one brood per season (Schuchmann and Kirwan, 2017).

APPLIED ECOLOGY. In the 1970s, Brazil was known to have participated in illegal bird trading, and there was a decline in the *Chrysolampis mosquitus* population. Fortunately, the species has stabilized and is not being threatened. It is listed as Least Concern by the IUCN Red List (BirdLife International, 2012).

REFERENCES

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Fig. 2. Female ruby topaz hovering while feeding.

[https://www.flickr.com/photos/michel_giraud-audine/4834792829/, downloaded 7 March 2017]

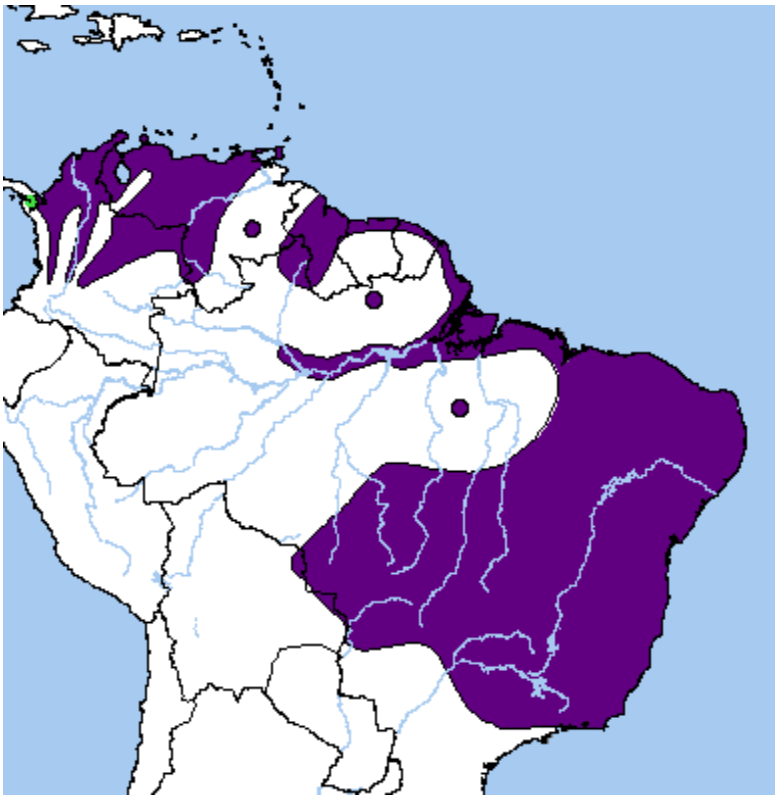

Fig. 3. Ruby topaz geographical distribution.

[http://www.birdphotos.com/photos/v?q=gallery&g2_view=xebug.ShowTree&g2_code=RangeMap&g2_species=Ruby-topaz%20Hummingbird, downloaded 7 March 2017]

Fig. 4. Male ruby topaz mating display.

[http://www.glennbartley.com/photoworkshops/Workshops/Trinidad.htm, downloaded 7 March 2017]