Blue-throated goldentail (*Hylocharis eliciae*, Trochilidae) is found at high elevation in Braulio Carrillo National Park, Costa Rica

[El colibrí colidorado (*Hylocharis eliciae*, Trochilidae) es observado a grandes elevaciones en el Parque Nacional Braulio Carrillo, Costa Rica]

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Blue-throated Goldentail (*Hylocharis eliciae*) is a member in the Trochilidae family which ranges from southern Mexico to western Panama along both slopes, with a few records in northwestern Colombia (Fig. 1). In Costa Rica, this species is a resident in lowlands and valleys (Clements 2010, Stiles and Skutch 1989). Its natural habitats are subtropical or tropical moist lowland forests and heavily degraded former forest. There are two subspecies recognized, H. e. *eliciae* (Bourcier and Mulsant 1846), occurring from Mexico to Costa Rica, and H. e. *earina* (Wetmore 1967) occurring from Panamá to extreme Colombia.

Blue-throated Goldentail is a medium-sized hummingbird that measures 9 cm and weighs 3.6 g. The crown and upperparts are green, shading to the metallic golden-green tail. The wings are dusky, while the sides and belly are green. The throat is metallic blue-violet and the bill is straight and coral red with black in the distal part. This species is partly dimorphic, with the female lacking a blue gorget but still bearing those bright rectrices (Stiles and Skutch 1989).



Figure 1. Distribution map of Blue-throated Goldentail (*Hylocharis eliciae*). Source: NatureServe InfoNatura (http://infonatura.natureserve.org).

Blue-throated Goldentail is primarily nectarivorous. The diet of this species has not been studied in detail but it is known to visit flowers of plants belonging to the genera *Stachytarpheta*, *Hamelia*, *Heliconia*, *Renealmia*, *Thalea*, *Inga*, *Psidium*, *Lobelia*, and some epiphytes (Feinsinger 1976, Stiles and Skutch 1989, Stiles 1999). As all hummingbirds, Bluethroated Goldentail also consume small arthropods in a small proportion (Remsen et al. 1986).

The elevational range of Blue-throated Goldentail is from the lowlands up to 1000 m. a.s.l. in Mexico (Howell and Webb 1995, BirdLife International 2011), and to 950 m a.s.l. in Costa Rica (Stiles and Skutch 1989). In El Salvador, this species is reported locally up to 2000 m (Thurber et al. 1987). There is little information about seasonal movements of this species but

it is considered relatively sedentary throughout most of its range except for limited movements during flowering (Stiles 1980, del Hoyo et al. 2005).

Two young males of Blue-throated Goldentail were captured in June 25 and 27, 2011 at 2.000 m a.s.l. in the Braulio Carrillo National Park next to the Chateau Refuge (Fig. 2, 3). These individuals were captured using standard mist-nets while studying the degree of ecological specialization in plant-hummingbird interactions networks along an altitudinal gradient in Costa Rica. This constitutes the highest elevation documented for the species in Costa Rica and in most of its geographical distribution.



Figure 2. Young male of Blue-throated Goldentail (*Hylocharis eliciae*) captured at 2.000 m a.s.l. in the Braulio Carrillo National Park, Costa Rica.



Figure 3. Upper parts of Blue-throated Goldentail (*Hylocharis eliciae*) captured at 2.000 m a.s.l. in the Braulio Carrillo National Park, Costa Rica.

Recent studies have shown that due to climate warming species from higher elevations have already declined in abundance (Powell and Hamilton DeRosier 1999), while other bird species have moved upwards, including several hummingbird species, such as Steely-vented Hummingbird, Fiery-throated Hummingbird, Purple-throated Mountain-gems, and Magenta-

throated Woodstars (Fogden and Fogden 2005). The two individuals of Blue-throated Goldentail reported here to be found at high elevation may be an erratic occurrence of the species but also the first evidence of movement upwards of the species induced by climate warming. More reports of the species in Rica Costa at this elevation are needed to confirm the latest.

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