A new subspecies of the Northern Beardless-Tyrannulet *Camptostoma imberbe*

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The Northern Beardless-Tyrannulet Camptostoma imberbe is a small tyrannid breeding from the southwestern United States to northern Costa Rica, beyond which it is replaced by the allospecies C. obsoletum. The English and scientific names of C. imberbe refer to the near absence in this genus of the rictal bristles typical of Tyrannidae.

Traylor (1979) recognized two subspecies of C. *imberbe*: a western form C. *i. ridgwayi* (Brewster) found from southern Arizona to Morelos

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Senior author's note: This description was one of many joint projects uncompleted at the time of Dr. Phillips' death. I have compiled it from detailed notes left at the Carnegie Museum of Natural History by Dr. Phillips.

and Michoacan in Mexico, and the eastern C. *i. imberbe* Sclater found from southern Texas through eastern and southern Mexico (including the Yucatan Peninsula) to northwestern Costa Rica.

More than 70 years ago, Griscom (1926) called attention to certain differences between mainland Mexican specimens and two immature males of *C. imberbe* that he had collected on Isla Cozumel, off the east side of the Yucatan Peninsula. He refrained from a formal description in default of adult specimens from Cozumel. Collections made by the writers and R. W. Dickerman in the 1960's have provided ample material to define the characters of the Cozumel population, which is more distinct from the nominate race than is the western *ridgwayi*; the latter is slightly larger than *imberbe*, and differs at most slightly in colour (van Rossem 1930). The Cozumel population may be called:

Camptostoma imberbe thyellophila

Holotype

Carnegie Museum of Natural History 143125, adult male (testes 3×2 mm, cranium fully pneumatized), from 11 km SW of San Miguel, Isla Cozumel, Quintana Roo, Mexico, collected by Kenneth C. Parkes and prepared by Juan Nava S. on 9 November 1965. Original number KCP 2734.

Diagnosis

Compared with C. i. imberbe, wing bars brighter and more richly rufescent (paler and greyer in imberbe), this colour continuing as narrow edgings on remiges (pale grey or whitish in imberbe); rump paler and greener than back (paler and browner in imberbe). Lower mandible with dark tip less extensive; colour of lower mandible and base of upper mandible "dull orange" in one specimen of which I recorded the bill colour in the field. Two specimens of imberbe from Costa Rica were annotated as having the lower mandible "flesh" and "pale flesh"; two from Belize were annotated as "flesh colour" and "yellowish".

Measurements

No significant difference between the subspecies was found in wing or tail length. Cozumel specimens have bills that are longer and somewhat more slender than those from elsewhere. Culmen length in both sexes differs (Mann-Whitney U-test, P<0.05). The difference in bill depth *per se* is not statistically significant, but if culmen length is taken into consideration such that a "slenderness index" is computed as bill depth at base divided by culmen length, the samples are separable at the P<0.05 level (Table 1).

Paratypes

Five adult males in good condition (i.e., with unbroken bills and relatively unworn plumage) are here designated as paratypes. They are as follows (with locality on Cozumel indicated): CM 142075 (2 km NE of San Miguel, 21 Jan 1965), 143089 (6 km NE of San Miguel, 6 Nov 1965), 143199 (11 km SW of San Miguel, 15 Nov 1965), 144760 (3 km

	C. i. imberbe		C. i. thyellophila	
	්් (n=8)	QQ (n=5)	යිය (n=7)	`♀♀ (<i>n</i> =4)
Culmen from base	9.69 ± 0.37	9.50 ± 0.50	10.64 ± 0.24	10.50 ± 0.41
	(9.0-10.0)	(9.0-10.0)	(10.5-11.0)	(10.0-11.0)
Bill depth/length	$\dot{0}.29 \pm 0.01$	0.31 ± 0.02	0.26 ± 0.02	0.27 ± 0.02
(''slenderness index'')	(0.28-0.31)	(0.28-0.35)	(0.24-0.29)	(0.24-0.29)

TABLE 1 Bill data (mean \pm standard deviation, range) for two subspecies of *Camptostoma imberbe*

E of E end of west-east road, 23 Nov 1971), and 144761 (8 km SW of San Miguel, 24 Nov 1971).

Habitat

The Northern Beardless-Tyrannulet on the Yucatan Peninsula was described by Paynter (1955) as uncommon, in "second growth, scrub, and light forest". It was apparently very uncommon to rare on Isla Cozumel during the early and middle 20th century; Nelson and Goldman saw only one during their stay 4–18 April 1901 (1901, unpublished field notes). Paynter (1955) failed to find the species during "several weeks . . . in January" 1949, as did Bond (1961) during 11–25 February 1961. Griscom (1926) collected two specimens, apparently the only ones he saw.

Much of Isla Cozumel is forested—not especially high forest, but not, in general, suitable for *Camptostoma*. On our collecting trips in 1965, we found it to be moderately common in suitable habitat, but absent from the heart of the forest. In September 1967, Isla Cozumel was devastated by Hurricane "Beulah", which toppled many of the largest trees in the forest, and in many places only scrubby saplings and clearings remained (Parkes 1969). On visits to Cozumel in April 1968 and November 1971, the forest had regenerated very little, but we found substantial numbers of *Camptostoma* in the hurricanecleared areas of the forest, now apparently excellent *Camptostoma* habitat.

Etymology

In view of the history of the Cozumel population, it seems appropriate to give the resident subspecies the name *thyellophila*, from the Greek *thyella*, storm or hurricane, and *phil*-, loving, fond of.

Specimens examined

C. i. ridgwayi: Arizona 2 (topotypes). C. i. imberbe: Mexico: Tamaulipas—2, Nuevo Léon—1, Hidalgo—1, Distrito Federal—1, Campeche—1, Quintana Roo—2. Belize—4. Honduras—2. Costa Rica—2. C. i. thyellophila: Mexico: Quintana Roo, Isla Cozumel 13.

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