

## GEOGRAPHY OF *CONDALIA VIRIDIS* AND *CONDALIA CORRELLII* (RHAMNACEAE)

GUY L. NESOM

Research Associate

Academy of Natural Sciences of Drexel University

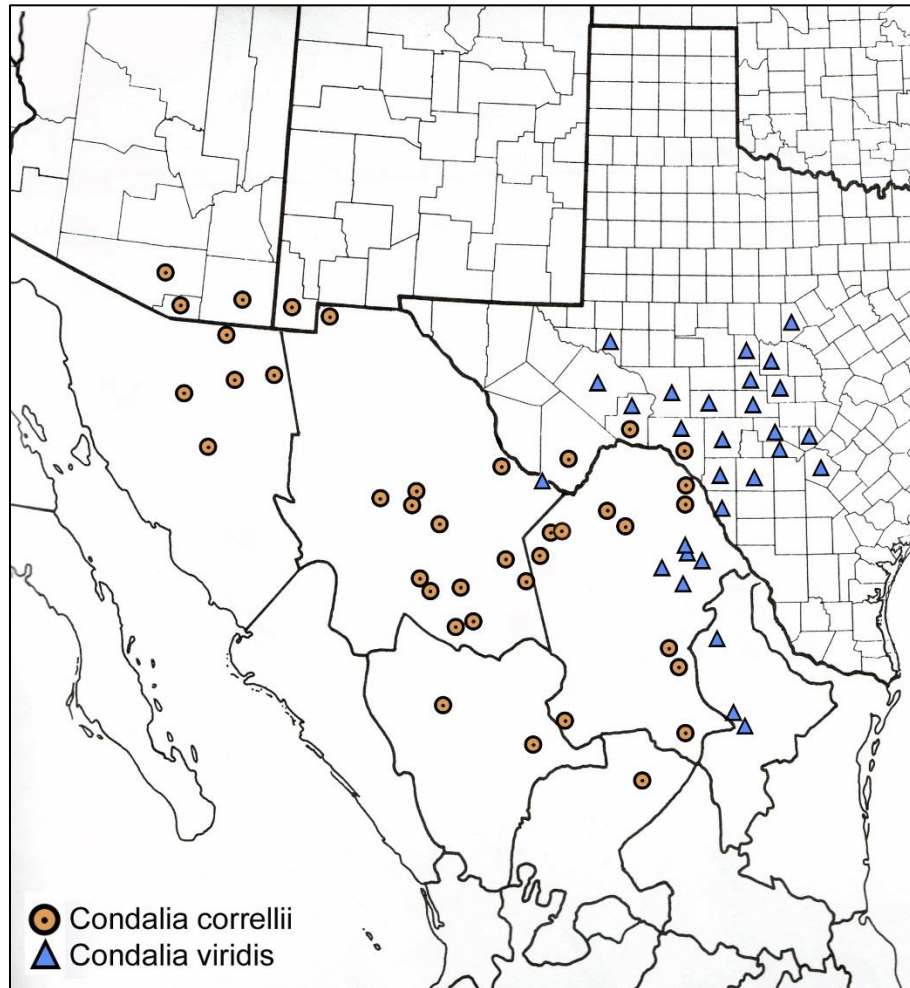
Philadelphia, Pennsylvania 19103

guynesom@sbcglobal.net

### ABSTRACT

Detailed geographical distributions are shown for *Condalia viridis* and *C. correllii*, both of which occur in the USA and Mexico. These correct and update distributions shown in an earlier report (Nesom 2023). *Condalia correllii* occurs in Brewster, Terrell, and Val Verde counties, Texas — vouchers are cited as part of the first report of the species from the state.

The distinction in morphology and geography between *Condalia viridis* I.M. Johnston and *C. correllii* M.C. Johnston was not fully resolved in a slightly earlier study (Nesom 2023). Conclusions from further study at TEX-LL and from specimen images are summarized in the map below.



Map 1. Distribution of *Condalia correllii* and *C. viridis*. This differs from the earlier assessment (Nesom 2023) in showing a wider distribution for *C. correllii*, narrower for *C. viridis*. Records of *C. viridis* previously cited from San Luis Potosí are *Condalia mexicana*.

The main difference in the revision is the wider distribution, including southwestern Texas, of *Condalia correllii* and the narrower of *C. viridis*. The couplet below shows modified criteria for their distinction, mostly in vestiture.

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| <p>1. Branchlets glabrous; leaf blades glabrous on both surfaces, 4–8(–11) mm long, basally acute to abruptly attenuate or short-attenuate, blades relatively thinner, lateral veins evident but not prominently raised, secondary and micro-vesiculate venation evident and dark-colored</p>  | <p>..... <b>Condalia viridis</b></p>   |
| <p>1. Branchlets sparsely to densely hirtellous; leaf blades sparsely to densely hispidulous at least abaxially, 7–11(–16) mm long, basally long-attenuate, blades relatively thicker, main lateral veins prominently thickened and raised, greenish, microvesiculate venation not evident</p> | <p>..... <b>Condalia correllii</b></p> |

In typical form, the difference in vestiture provides an easy distinction between the two species, but in northern Coahuila and southwestern Texas, the hirtellous vestiture of *C. correllii* often is reduced. In that region the venation usually is reliable in making the identification.

**Vouchers for *Condalia viridis* in Mexico.** **Coahuila.** Mpio. Villa Unión, camino Nava-Villa Unión, matorral xerófilo, 15 Aug 1997, *M. González 2920* (MEXU); 1 mi S of Allende, on road from Piedras Negras S to Monclova, under *Acacia* in wash, 23 Aug 1938, *I.M. Johnston 7015* (holotype: GH; isotype: US); 1 mi E of Sabinas on the road to Don Martin, 3 Oct 1960, *M.C. Johnston 5887* (TEX); Múzquiz, Santa Anna Canyon, 15 Jul 1936, *Marsh 461* (TEX-2 sheets); Allende, 10 May 1939, *Marsh 1770* (TEX). **Nuevo León.** [Mpio. García], near Casa Blanca [just W of Monterrey], 12 Sep 1946, *Barkley 16013* (TEX); N de Bustamante, 3 Aug 1975, *S. González E. s.n.* (TEX); Chipinque Mesa, SW of Monterrey, 8 Jun 2008, *Webster 11183* (TEX-2 sheets, one with *C. viridis*, one with *C. hookeri*).

I have annotated and mapped one collection from Chihuahua as *Condalia viridis*, although it is in the geographic range of *C. correllii* and might prove to be more closely associated with latter if molecular evidence were available.

**Chihuahua.** Fern Canyon, side canyon of Santa Elena Canyon of Rio Grande, on S (Chihuahua) side of the river, ca. 3 mi W of Santa Elena Picnic Area of Big Bend Natl Park, around cave and ledges near spring, 650 m, 24 Nov 1973, *Wendt & Lott 98* (LL).

**Vouchers for *Condalia correllii* in Texas.** **Brewster Co.:** Maravillas Creek, along dry streambed, 28 Feb 1976, *Butterwick 2010* (TEX); Between Burro Mesa and Chisos Mts, gravelly wash, 1150 m, 6 Jul 1931, *Moore & Steyermark 3402* (GH, NY); near Quartz Crystal Mine, S of south rim Chisos Mtn area, 15 Aug 1937, *Warnock 1117* (TEX); Black Gap, infrequent and widespread along limestone arroyos and flats, 1 Jun 1950, *Warnock BG-30* (SMU, TEX); Horse Canyon, 2000 ft, 24 Jun 1950, *Warnock BG-103* (LL, SMU); Big Bend Natl Park, 1.4 mi E of Castolon, sandy soil along Rio Grande River, 19 Apr 1948, *Whitehouse 19684* (SMU); Big Bend Natl Park, Tornillo Creek near Hot Springs, 20 Apr 1948, *Whitehouse 19722* (NY). **Terrell Co.:** Oasis Ranch Preserve (TNC), 2.0-2.1 air mi ENE of jct Independence Creek Road and Texas 349, 2460-2480 ft, 6 Apr 2001, *Carr 19522* (TEX); Losier Canyon, 23 mi SE of Dryden, Rte 90, 7 Jul 1958, *Correll & Johnston 19386* (LL); ca. 8.5 mi NW of Sanderson on Ft. Stockton road, 2 Aug 1945, *Lundell 14189* (LL); 8 mi N of Dryden, Hwy 349, along fence of cattle ranch with *Prosopis*, *Opuntia*, 700 m, 2 Jul 2001, *Schuhly WS-478* (MISS); Blackstone Ranch, 18 mi S of Sheffield, mesquite scrub above Independence Creek, 1-2 Jul 1946, *Webster 456* (TEX); near Roland White ranch house, flats 1500 ft, 14 Nov 1953, *Warnock 11784* (SMU). **Val Verde Co.:** Beaver Lake, 15 Aug 1942, *Cory 37992* (GH); Del Rio, near Twin City Motel off Hwy 90, abandoned lots, 30 Jul 1993, *Holmes 6751* (BAYLU); along Devil's River, just W of Hwy 189, ca. 15 mi NE of Judo, NE-facing limestone bluffs, 15 Apr 1971, *Redfearn 27276* (WILLD); between Langtry and Dryden along Hwy Hwy 90, Rio Grande, dirt track going under bridge, mesquite, 17 Oct 2001, *Spujt 14429* (BRIT); Amistad Natl Recreation Area, Rough Canyon, 21 Nov 2002, *Spujt 15148* (BRIT); 10-12 mi N of Del Rio toward Loma Alta, 1050 ft, 22 Jun 1957, *Warnock 14967* (SMU).

Records of Texas occurrences of *Condalia viridis* from various sources and summarized by Kartesz (2009) — Hudspeth, Jeff Davis, Live Oak, Zapata counties — are other species. I have not seen a voucher for a record from Gillespie County.

#### **ACKNOWLEDGEMENTS**

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#### **LITERATURE CITED**

- Kartesz, J.T. 2009. Floristic Synthesis of North America, Version of 22 Aug 2022. BONAP (Biota of North America Program). Chapel Hill, North Carolina.
- Nesom, G.L. 2023. Taxonomic synopsis of *Condalia* (Rhamnaceae) in Mexico and the USA. *Phytoneuron* 2023-27: 1–115.