

## FURTHER STUDIES IN « LYCIUM »

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### RESUMEN

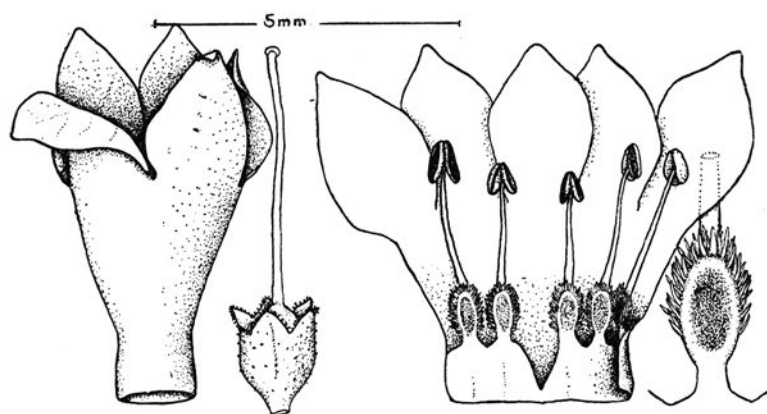
**Estudios adicionales sobre « Lycium ».** — El autor describe una nueva especie: *Lycium fimbriatum*, después de haber estudiado el material del noroeste argentino. En esta publicación ilustra los caracteres florales y establece un cuadro comparativo con otras especies del género: *L. Comberi* C. L. Hitchcoc., *L. Vergarae* Phil., *L. Chilense* Bert. y *L. ciliatum* Schlecht.

Through the generosity of Dr. Horacio R. Descole of the Instituto Miguel Lillo de la Universidad Nacional de Tucumán, a number of duplicate collections of *Lycium* have been made available to the writer for study. Among these South American collections there is one plant which seemingly is an undescribed species which can be characterized as follows:

#### ***Lycium fimbriatum* C. L. Hitchcock spec. nov.**

A sparingly armed much-branched shrub, the bark grayish-brown; branches glabrous; leaves in fascicles of 3-7, narrowly oblanceolate, 4-10 mm long, 1-2 mm broad, rounded to mucronulate, sparingly glandular-puberulent and somewhat ciliate; flowers mostly one per node, on pedicels 2-3 mm long; calyx campanulate, 1-1,5 mm long and about as broad, minutely puberulent, the lobes ca. 1/3 the length of the tubular portion, their margins somewhat ciliate-pubescent; corolla ca. 6 mm

long, glabrous exteriorly, tubular portion 3-3,5 mm long, slightly less than 1 mm broad at the slenderest portion, ca. 3 mm broad at summit, lobes 5, glabrous, 2,5-3 mm long; stamens 5, inserted ca. 1 mm above base of corolla, the longest one scarcely 1 mm longer than corolla-tube, the filaments enlarged and apparently somewhat glandular at base, the enlarged basal portion fringed with short broad straight scale-like hairs, the adjacent corolla-tube also somewhat pubescent near the filament bases; anthers ca. 0,5 mm long; styles slightly longer than stamens; fruits apparently red, 2-4 mm broad, several-seeded.



*Lycium fimbriatum* C. L. Hitchcock spec. nov.

*Planta fruticosa, ramosissima; ramis spinosis, glabris, foliis 3-7-fasciculatis, anguste oblanceolatis, 4-10 mm longis, 1-2 mm latis, obtusis vel apiculatis, minute puberulentis et ciliatis; floribus solitariis, pedicellis 2-3 mm longis; calyce campanulato, 1-1,5 mm longo, minute pubescente, tubo lobis 3-plo longiore, lobis ciliato-pubescentibus; corolla ca. 6 mm longa, extra glabra, tubo 3-3,5 mm longo, ad verticem ovarii 0,75-1 mm in diametro, ad verticem ca. 3 mm in diametro, lobis corollae 5, glabris, 2,5-3 mm longis; staminibus 5, subaequalibus, e tubo corollae 0-1 mm exsertibus, ad basem corollae tubi partem tertiam inferam adhaerentibus, ad basem amplificatis, glanduosis, marginibus fimbriatis; stylo ca. 0,5 mm staminibus longiore; bacca 2-4 mm in diametro, plurisperma.*

<i>L. fimbriatum</i>	<i>L. comberi</i> C. L. Hitchc.	<i>L. vergarae</i> Phil.	<i>L. chilense</i> Bert.	<i>L. citiatum</i> Schlecht.
calyx : 1-1,5 mm long the lobes less than half as long as tube	3,5-5 mm long lobes 1/2-1/3 as long as tube	2,5-4 mm long lobes lobes nearly equal to tube	4-8 mm long lobes equal to or much longer than tube	2,5-5 mm long lobes nearly equal to tube
corolla : ca. 6 mm long, lobes not quite equal to tube, glabrous on the outside	7-9 mm long, lobes not quite so long as tube, glabrous on the outside	5,5-8 mm long lobes usually longer than tube, pubescent near base exteriorly, and ciliate	6-10 mm long, lobes nearly equal to tube, pubescent near base exteriorly, and ciliate	8-9 mm long lobes longer, than tube, pubescent near base exteriorly, and ciliate
leaves : 4-10 mm long 1-2 mm broad, pubescent	5-20 mm long 1 mm broad, very pubescent	4-10 mm long 1-2 mm broad, densely pubescent	10-30 mm long 0,5-6 mm broad, pubescence variable	15-40 mm long 5-25 mm broad, glabrous to simply pubescent
pedicels : 2-3 mm long	5-10 mm long	2-4 mm long	2-10 mm long	3-20 mm long
habit : erect shrubs over 2 dm tall	spreading shrubs 0,5-2 dm tall	spreading shrub 1-2 dm tall	shrubs, 4-25 dm tall	shrubs, 10-25 dm tall

*Spec. ex.*: Type (51867, W T U.) Tucumán, Dept. Tafi, Río Churqui at 2000 m elevation, Feb. 12, 1908, leg. Lillo (7637), in the University of Washington Herbarium. Known to me only from the type collection; (850 LIL.) *ibid.*, leg. ipse (*dupl. type*): (994 LIL.) Tucumán: Mesopotamia leg. Castellón (460) II 1918.

This small-flowered species must be included in the section *Selidophora* C. L. Hitchc. (*Ann. Mo. Bot. Gard.* 19: 312. 1932) because of the peculiar enlarged and glandular filament bases, but differs from the other species of that section in several particulars as outlined in the following table:

As can be seen from the above comparison, *L. fimbriatum* differs materially in general aspect from the rest of the species of the section to which it belongs. Superficially it appears to be much more similar to *L. Berlandieri* Dunal of Mexico and adjacent United States and to *L. vimineum* Miers, *L. nodosum* Miers, *L. minimum* C. L. Hitchc., and *L. cuneatum* Dammer of South America, but differs decidedly from any of these plants because of the distinctive stamen-bases characteristic of the section *Selidophora*; in addition *L. cuneatum* (and its allies *L. Morongii* Brit., *L. Martii* Sendtner, and *L. glomeratum* Sendtner are tree-like species with glomerate flowers and leaves 0,5-3 cm broad; *L. nodosum*, *L. vimineum*, *L. minimum*, and *L. Berlandieri* all have exerted stamens and larger calyces, the calyx of *L. minimum* (the smallest flowered species of the above group) being at least 2 mm in length, as compared with the smaller calyx of *L. fimbriatum*.

Several collections from near Capital, Catamarca, namely: (878 LIL.) Castellon 1038, collected Sept. 15, 1908; (LIL. 883) Castellon (without number), collected Sept. 11, 1910, and the collection of Aug. 25, 1910 Castellon, (LIL. 881) are of particular interest, since they are quite intermediate in character between *L. chilense* Miers ex Bertero and *L. ciliatum* Schlecht. as the following abbreviated description of the plants will show.

Stems densely pubescent with trichomes ca. 0,5 mm long, these hairs somewhat tangled but mostly simple or irregularly forked once or twice; leaves ovate-lanceolate, 10-20 mm long,

6-12 mm broad, densely pubescent with forked trichomes (some unbranched hairs also usually present); calyx-lobes 3-4,5 mm long, with same pubescence as that of leaves; corolla usually quite pubescent exteriorly, the lobes ciliate.

Since I am unable at this time to compare these collections with the various phases of the aggregate which I called (*l. c.* 314) *L. chilense*, I hesitate to name them as new, but it should be noted that they do not fall within the range of variation for either *L. chilense* or *L. ciliatum* as those species were describes by me. Since Castillon's plants are rather intermediate between these two species (pubescence that of *chilense*, leaf-shape that of *ciliatum*, leaf size and calyx-lobes intermediate) I suspect that they may have had a hybrid origin, but am, for the time being, calling them *L. chilense*.

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