

#### IV. A NEW SPECIES OF LONICERA FROM PENNSYLVANIA.

BY OTTO E. JENNINGS.

(PLATE XX.)

Among some botanical specimens collected by Mr. W. E. Clyde Todd in western Ontario during the summer of 1906, and which were submitted to the writer for determination, was a branch of *Lonicera oblongifolia* (Goldie) Hooker, which differed so radically from specimens collected on several occasions in northwestern Pennsylvania by the writer, and regarded at that time as *Lonicera oblongifolia*, that a possible confusion of species was at once suggested. By the kind courtesy of Prof. J. M. Macoun, the writer was permitted to make a careful examination of the specimens of *Lonicera oblongifolia* in the Herbarium of the Geological Survey of Canada. These collections, together with the collections in the Herbaria of the Carnegie Museum, it is believed, represent a fairly representative series of the plants in question and it appears from them that there is ample justification for the recognition of a new species closely allied to *Lonicera oblongifolia* and belonging with it in the subsection *Oblongifoliæ* Rehder.

In his "Synopsis of the Genus *Lonicera*" Rehder<sup>1</sup> characterizes the subsection *Oblongifoliæ*, founding it upon "*Lonicera oblongifolia* Hooker" and including only that species and its *forma* "*calyculata*, Zabel," which Rehder says "differs only in the distinctly toothed calyx." The relations of the subsection to the other subsections of the genus are well stated by Rehder: "A monotypic group restricted to northeastern North America."<sup>2</sup> It has no strongly marked characters, but as it shows no close relation to any other species, it seems best to consider it as representing a separate subsection. Its nearest affinity is with the *Alpigenae*, but it differs chiefly in the obsolete bractlets, wholly adnate to the ovaries and therefore indistinct, by the very caducous bracts, the absence of glands, the kind of pubescence

<sup>1</sup> Rehder, Alfred. Synopsis of the Genus *Lonicera*. Missouri Botanical Garden, 14th Annual Report: 27-232. 1903.

<sup>2</sup> *L. c.*, p. 101.



and the small seeds. *L. oblongifolia* may be considered the American representative of the Alpigenae of the Old World, but it is less closely allied to that group than is *L. oblongifolia* to the Old World Rhodanthæ. Both species differ from their allies in the caducous bracts and the tendency of the bractlets to become obsolete."

*Lonicera oblongifolia* was first described by John Goldie in 1822 as *Xylosteum oblongifolium*<sup>3</sup>; Hooker first characterized it as a *Lonicera* in his *Flora Borealis Americana* in 1833.<sup>4</sup> The original description which was kindly copied for the writer by Mr. Edward J. Nolan of the Academy of Natural Sciences of Philadelphia, is as follows: "*Xylosteum oblongifolium*; baccis coadunatis, foliis oblongis lanceolatisque obtusis junioribus præcipue corollisque pubescentibus."

*Habitat.* — In one spot only in a swamp on the island of Montreal. *Fl. July.*

A *shrub* of about four feet in height, much branched, with pale glabrous bark. *Leaves* lanceolate, and very pubescent on both sides in the younger branches, oblong, obtuse, and only slightly pubescent beneath in the older ones, veiny. *Peduncles* about an inch long. *Germens* coadunate, producing two yellowish pubescent flowers. *Bracteas* two, excessively minute, broadly ovate, appressed, and, as well as the scarcely lobed calyx, glabrous. *Berries* red."

#### DESCRIPTION OF NEW SPECIES.

##### *Lonicera altissima* sp. nov.

Frutex gracilis erectus, 1.5–3.5 m. altus: cortice glabra cinerea: ramis juvenibus subpurpureis: foliis oblanceolatis vel obovatis, vel raro ovalibus, subdensis, marginibus revolutis utrinque glabris, supra pallidulo-viridibus, nervis depressis, subtus pallidis, glaucis, acriter reticulatis; apice acutulo vel retuso plerumque mucronato; basi sensim angustata in petiolum valde brevem (1 mm. longum) marginatum, vel sessile: floribus 1.2–1.8 cm. longis, geminis ad apices pedunculorum gracilium axillarium 2–3.2 cm. longorum; bracteis et lobis calycis plerumque in toto obsoletis; corolla flava, extra subpurpurea, intra purpurea, ad basin gibbosa, glabra vel raro ad basin subpubescente, bilabiata ad vel plerumque infra medium, lobis late obtusis; staminibus leviter exsertis, filamentis purpureis ad basin

<sup>3</sup>Goldie, John. *Jameson's Edinburgh Philosophical Journal*, 6: 323, 1822.

<sup>4</sup>Hooker, Wm. J. "Flora Borealis Americana," 1: 284, 1833.





*Lonicera altissima* Jennings.







pubescentibus; stylis purpureis sæpe pubescentibus, cum filamentis æquilongis; ovariis glabris prope ad apicem connatis: baccis globosis, bioculatis 1.0–1.4 cm. crassis, succidis, rubris, plerumque glaucis; seminibus 3–4 mm. longis, lævibus, lucidis, ochraceis plerumque plus minusve oblongo-lenticularibus.

A slender erect shrub 1.5–3.5 m. high: bark glabrous, gray: young twigs purplish: leaves oblanceolate to obovate, or rarely oval, thickish, margins revolute, glabrous on both sides, above light green, nerves sunken, below pale, glaucous, sharply reticulated; apex somewhat acute to retuse, usually mucronate; base gradually narrowed into a very short (1 mm. long) margined petiole, or sessile: flowers 1.2–1.8 cm. long, paired at the apexes of slender axillary peduncles 2–3.2 cm. long; bracts and lobes of the calyx usually wholly obsolete; corolla yellow, purplish tinged outside, purple inside, gibbous at the base, glabrous or rarely slightly pubescent at the base, two-lipped to the middle or usually below, lobes broadly obtuse; stamens slightly exserted, filaments purple, pubescent toward the base; style purple, often pubescent, same length as filaments; ovaries glabrous, united almost to the top: berries spherical, two-eyed, 1.0–1.4 cm. in diameter, juicy, red, usually glaucous; seeds 3–4 mm. long, smooth, shining, ochraceous, usually more or less oblong-lenticular.

The type specimens, now in the Pennsylvania Herbarium of the Carnegie Museum, were collected by the writer about one mile southeast of Linesville, Crawford County, Pennsylvania, in the Pymatuning Swamp. Specimens were collected in full bloom June 7, 1904, with ripe fruit, August 19, 1904, and again June 13, 1905, shortly after the bloom had fallen. The plants were growing in a water-soaked soil partly covered with Sphagnum and were associated with *Rhus vernix* Linnæus, *Alnus incana* (Linnæus) Willdenow, *Illicioides mucronata* (Linnæus) Britton, *Spathyema fætida* (Linnæus) Rafinesque, *Sarracenia purpurea* Linnæus, etc., the whole constituting an ecological formation probably transitional to the typical *Tamarack-Sphagnum* bog formation.

The specific name, *altissima*, has been given this plant because of its tall, slender habit. Many of the shrubs were over ten feet in height, a height probably not attained by any other shrubby *Loniceras* of northeastern North America.

Specimens closely approaching the type specimens of *Lonicera altissima* were seen by the writer, as follows: Swamps, Courtland, On-



tario (Macoun, 62,956); Stittsville, Ontario (Macoun); New Haven, Vermont (Brainerd).

The following key, arranged mainly in accordance with the plan followed in Britton's Manual,<sup>5</sup> will serve to more clearly contrast the diagnostic characters of the species of *Lonicera*, as now recognized as occurring in northeastern North America.

KEY TO THE SPECIES OF *LONICERA* OCCURRING IN THE NORTHEASTERN  
UNITED STATES AND CANADA.

Vines.

Flowers in heads or interrupted spikes.

Corolla two-lipped.

Corolla glabrous within. 1. *L. Caprifolium* Linnæus.

Corolla pubescent.

Leaves pubescent, at least beneath; corolla yellow.

Corolla-tube slightly gibbous at base; leaves pubescent, both sides, at least when young, ciliate.

2. *L. hirsuta* Eaton.

Corolla-tube strongly gibbous at base; leaves glabrous above, pubescent beneath, scarcely, if at all, ciliate.

3. *L. glaucescens* Rydberg.

Leaves glabrous, beneath very glaucous.

Corolla greenish-yellow, the tube somewhat gibbous.

Corolla-tube 6-10 mm. long; filaments hirsute at base.

4. *L. dioica* Linnæus.<sup>6</sup>

Corolla 10-14 mm. long; filaments nearly glabrous.

5. *L. Sullivantii* A. Gray.

Corolla light yellow or orange, its slender tube not gibbous.

6. *L. flava* Sims.

Corolla tubular, the limb nearly regular.

7. *L. sempervirens* Linnæus.

Flowers in pairs on short axillary peduncles.

8. *L. Japonica* Thunberg.

Shrubs; flowers in pairs on axillary bracted peduncles.

Bracts of peduncle subulate, linear, minute or none.

Leaves rarely cordate, more or less pubescent, or ciliate.

Leaves pale or glaucous, thick, strongly reticulate veined.

Peduncles shorter than flowers; fruit blue; leaves ciliate.

9. *L. cærulea* Linnæus.

Peduncles equalling or longer than the flowers; fruit red; leaves not ciliate.

<sup>5</sup> Britton, N. L. "Manual of the Flora of the Northern States and Canada," 2nd edit., 1905.

<sup>6</sup> (*Lonicera ciliata* Muhlenberg.)



Leaves oblong to ovate, pubescent, stamens included, seeds about 2 mm. long.

10. *L. oblongifolia* (Goldie) Hooker.

Leaves oblanceolate to obovate, mostly glabrous; stamens exserted, seeds 3-4 mm. long.

11. *L. altissima*.

Leaves bright green, ciliate, not strongly reticulated; fruit red.

12. *L. Canadensis* Marshall.<sup>7</sup>

Leaves pale, persistently densely pubescent beneath.

13. *L. Xylosteum* Linnæus.

Leaves cordate, glabrous.

14. *L. Tatarica* Linnæus.

Bracts of peduncle broad, foliaceous. 15. *L. involucrata* (Richardson) Banks.

EXPLANATION OF PLATE XX.

A. *Lonicera altissima*. Branch. One half natural size.

B. Partly formed fruits showing; *b*, scars of bractlets. Natural size.

C. Seeds. Natural size.

D. Peduncle and flowers. Natural size.

E. Leaf showing strong reticulation, under side. Natural size.

(<sup>7</sup> *Lonicera glauca* Hill.)



Jennings, Otto E. 1906. "A new species of *Lonicera* from Pennsylvania." *Annals of the Carnegie Museum* 4(1), 73–77. <https://doi.org/10.5962/p.328718>.

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