

*tantha Lappula* Brand in Fedde, Repert. 24: 56 (1928) and Pflanzenr. [Heft 97] IV, 252<sup>2</sup>: 147 (1931).

In the Pflanzenreich Brand placed his *Cryptantha Lappula* among the synonyms of *Lappula Redowskii* (Hornem.) Greene. I believe, however, that the species belongs under *L. echinata* Gilib. The evident corollas and the gross aspect of the type are of that species. A microscopic study of the (immature) nutlets of *C. Lappula* seems to show a double row of lateral prickles. Finally the type is given as from Concepcion, Chile, a locality at which *L. Redowskii* is certainly not to be expected to grow naturally, though a busy port at which an aggressive weed, such as *L. echinata*, might be introduced without any cause for surprise.

*Lappula echinata* is generally accepted as introduced into North America. This seems probable, though it is to be noted that the plant was collected in the New World at a very early date. A specimen in the DuBois collection at Oxford is labeled "brot from Maryland by Mr. Wm. Vernon, 1698." Among Michaux's collections at Paris there is one of this species labeled as "Dans ville de Montreal, 1792." The Smith collections in London contain a specimen labeled: "North America, 1817, F. Booth." In the British Museum there is a collection made by Douglas, during 1826, "In the valleys of the Rocky Mts.," most likely in northeastern Washington. It seems to have been again collected in the latter region only within the past ten years, though it has been well known in the southern parts of western Canada for at least a generation. There are reasons to believe that the railroads may have much aided in the distribution north of the International Boundary. The plant has exhibited an evident, progressive increase and migration westward across the more northern of the western United States. It is now rapidly increasing in eastern Washington where it gives every evidence of being a recent immigrant.

***Cryptantha circumscissa*** (H. & A.) Johnston, Contr. Gray Herb. 68: 55 (1923).

A few years ago, l. c. 81: 75 (1928), I reported this characteristic plant of western United States from near Zapala, Neuquen, Argentina. A second station in Neuquen may now be recorded. At Munich I have seen specimens labeled as collected by Erik Ammann (no. 7) at Cerro Mesa between Sept. and Nov. 1927. The new station is nearly 90 km. southeast of Zapala.

***Cryptantha clandestina*** (Trev.), comb. nov. *Lithospermum clandestinum* Treviranus, Del. sem. a 1832 in hort. Bonnensi collect. p. 2 (1832-3). *Cryptantha glomerata* Lehmann, Del. Sem. Hamb. 1832: 4 (1832), nomen nudum; Fischer & Meyer, Ind. Sem. Hort. Petrop. 2: 8

and 35 (1836); Johnston, Contr. Gray Herb. 78: 58 (1927). *Cryptantha microcarpa* Fischer & Meyer, Ind. Sem. Hort. Petrop. 2: 8 and 35 (1836).

A study of the original description of *Lithospermum clandestinum*, and of old garden material representing it, has made it clear that it is that well known cleistogamic species of Chile, the two forms of which have passed as *Cryptantha glomerata* and *C. microcarpa*. Fischer & Meyer, when describing *C. microcarpa*, in fact, actually cited *L. clandestinum* as a synonym. In the Bonn seed-list for 1832, published in Dec. 1832 or Jan. 1833, the name *Lithospermum clandestinum* appears in the alphabetic list on the second of the pages of that quarto catalogue. A reference leads to a footnote which reads as follows: "Diffusum hispidum; fol. lanceolatis amplexicaulibus; calycibus subsessilibus ventricosis corollam excedentibus; semin. granulatis. Annuum. Corolla alba, tubo ventricoso, limbo conniventi. Semina duo plerumque abortiunt. T[reviranus]." The name, *L. clandestinum*, appears again in the Bonn list for 1833, but not in those for 1834 or 1835.

*Cryptantha glomerata* Lehm. is the type-species of *Cryptantha*. Recently I had the privilege of consulting the extensive collections of old seed-catalogues at Berlin and Geneva. I now find it possible to record several important references in the history of that genus and species which were either unknown or unavailable to me at the time of my work on the group. The first mention of *Cryptantha glomerata* Lehm. and of the generic name appears in Lehmann's seed-list of the Hamburg Garden for the year 1832. The binomial appears as a mere name on page 4, thus: "*Cryptantha glomerata* Lehm." No description or explanation of the name is given! The list is dated 1832 and was probably published, as was customary with such lists, around the close of the year. No mention of the binomial is found in the Hamburg lists for 1830, 1831 or for 1833 or 1834. In 1835, p. 4, again without description, appears: "*Cryptantha glomerata* Lehm. (Del. Sem. 1832)." In 1836, p. 4, the following two names appear bare of description: "*Cryptantha glomerata* Lehm." and "*Cryptantha microcarpa* F. & M." These are repeated in the list for 1837, p. 4. In the list for 1838, p. 4, there is merely the name, "*Cryptantha microcarpa* F. & M." Fischer & Meyer, in their St. Petersburg seed-list for 1835, supplied the first descriptions of *Cryptantha glomerata* Lehm. and *C. microcarpa* F. & M. This Russian list bears a censor's date, Dec. 25, 1835, the equivalent of Jan. 5, 1836 of our present calendar. There is no mention of *Cryptantha* in the St. Petersburg list for 1834! Fischer & Meyer, when publishing and describing "*C. glomerata* Lehm." in their list for 1835, attribute the

name to "Bernhardi in litt." A study of Bernhardi's seed-lists, Sel. sem. hort. Erfurt., shows that the name "*C. glomerata* Lehm." appears as a mere binomial in those for 1833 (Jan. 18, 1834), 1834 (Feb. 24, 1835) and 1835. There is no mention of *Cryptantha* in the Erfurt list for 1832!

From the facts I have given it becomes evident that *Cryptantha glomerata* was in cultivation at Bonn and Hamburg in 1832. Treviranus immediately described the Bonn cultures as *Lithospermum clandestinum*. Lehmann applied to his Hamburg cultures the name *Cryptantha glomerata*, but did not describe it, that being done for him three years later by Fischer & Meyer who based their description on plants grown at St. Petersburg. There is no information as to the channels by which the species was introduced into cultivation. I suspect, however, that the original seed may have been obtained by Bertero, who collected the plant near the Rio Quillota, Chile, as early as 1828, and that seeds from this source may have been distributed from Turin.

***Amsinckia intermedia*** Fischer & Meyer, Ind. Sem. Hort. Petrop. 2: 2 and 26 (1836).

This name appears bare in the alphabetic list on page 2 of the seed-list cited above. On page 26 (p. 1 of reprint) the following description is found, "A. INTERMEDIA. A. corolla fauce glabra nuda, limbo tubo sub-breviore; staminibus ad faucem insertis. — Corollae tubus  $1\frac{1}{2}$  lin. longus, limbus fere 3 lin. in diametro, saturate aurantiacus maculisque 5 saturatioribus pictus. — Species intermedia *A. lycopsioidem* inter et *A. spectabilem*; a priore dignoscitur insertione staminum, a posteriore corollis longe minoribus et praesertim corollae tubo non (ut in illa) ad faucem plicis intrusis semiclausa. — Hab. cum sequente specie [*A. spectabilis*] circa coloniam ruthenorum Ross in portu Bodega Novae Californiae. Annua." The seed-list in which this description occurs bears the printed censor's date, Dec. 25, 1835. This equals Jan. 5, 1836 of the present calendar.

Through the kindness of Prof. B. A. Keller, Director of the Institute and Botanic Garden at Leningrad, I have received authentic material of *Amsinckia intermedia*. This consists of an authentic fragment of the species, from the herbarium of Meyer, one of the co-authors of the species, and a fine specimen from the plantings in the St. Petersburg Garden in 1836. The specimens agree with the interpretation of *A. intermedia* given by Suksdorf, Werdenda 1: 88 (1931). The plant is a member of that variable and bewildering island species that Macbride, Contr. Gray Herb. 49: 12 (1917), and Jepson, Man. Fl. Pl. Calif. 844 (1925), have incorrectly called "*A. Douglasiana*." Greene, Bot. S.