is more appropriate or familiar. It is clear that Miller's original 1768 publication must be followed.

According to the Flora Europa treatment our plant is to be called:

Corydalis solida (L.) Swartz, ssp. solida.

The correct citation following Bunting, for our plant is: *Corydalis bulbosa* (L. emend. P. Miller) DC. in Lam. and DC. Fl. Franc. 4:637, 1805, non Pers. 1807.

GORDON P. DEWOLF, JR.

ARNOLD ARBORETUM OF HARVARD UNIVERSITY

JAMAICA PLAIN, MASSACHUSETTS

## ALYSSUM (CRUCIFERAE) INTRODUCED IN NORTH AMERICA

## THEODORE R. DUDLEY

The annual species of Alyssum, A. alyssoides (L.) L. [syn. A. calycinum L.] and A. desertorum Stapf [syn. A. minimum Willd. - non L.] are well-known Old World introductions in the North American flora. Assigned to Section Psilonema and native to much of Europe and Asia, A. alyssoides is naturalized in the Argentine and Quebec. In the United States, it is naturalized in Maine, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, West Virginia, Virginia, Michigan, Indiana, Illinois, Wisconsin, Montana, Colorado, Idaho, Wyoming, Utah, California, Oregon, and Washington. Another native of Europe and Asia, but belonging to Section Alyssum, is A. desertorum, which has a much narrower distribution in the United States. It has been collected only from sporadic populations in Bannock County, Idaho; Missoula County, Montana; Sheridan County, Wyoming; and San Juan County. Utah. Frequently confused in American herbaria with A. alyssoides, A. desertorum is easily distinguished by its larger and glabrous silicles, and early deciduous sepals. The sepals of A. alyssoides are persistent, and its silicles always possess an indumentum of stellate hairs.

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Material carrying the name Alyssum maritimum (L.) Lam., a plant widely naturalized in many states, should be redetermined as Lobularia maritima (L.) Desv. Similarily, adventive specimens of A. petraeum Ard. and A. saxatile L. should be redetermined as Aurinia petraea (Ard.) Shur and Aurinia saxatilis (L.) Desv., respectively.

Three taxa in Section Alyssum previously unrecorded for the North American flora, *Alyssum szowitsianum* Fischer & A. Meyer, *A. minus* var. *micranthum* (A. Meyer) Dudley and *A. strigosum* Banks & Solander subsp. *strigosum* were recently discovered in the Dudley Herbarium (DS), Stanford University.

A. szowitsianum Fischer & A. Meyer, Ind. Sem. Hort. Petrop. 4: 31. 1837.

Utah. Salt Lake County, Salt Lake City, waste ground above gully, between 14 East Street and 17 South Street, 5 May 1944, A. O. Garrett s.n.; ibid., 26 May, 1944, A. O. Garrett 8708; ibid., dry unoccupied city lot, near ravine, 14 South Street near 18 East Street, 26 May 1944, A. O. Garrett 8708 (previously determined as A. alyssoides).

- A. minus (L.) Rothm. var. micranthum (A. Meyer) Dudley, Jour. Arnold Arb. 45(1): 67. 1964.
  Colorado. Jefferson County, Golden, waste places, el. 5600 ft., 18 May 1940, J. H. Ehlers 7985 (previously determined as A. campestre). Utah. Salt Lake County, Salt Lake City, near ravine, 23 April 1944, A. O. Garrett 8675. California. Modoc County, roadside 2.6 miles north of Buck's Creek Ranger Station, east side of Goose Lake, 13 June 1961, Ira L. & Dorothy Wiggins 16468. (previously determined as A. alyssoides).
- A. strigosum Banks & Solander in Russell, Fl. Aleppo 2: 257. 1794.

California. Santa Clara County, Santa Cruz mountain peninsula, Sierra Azul, west of Mt. Umunhum, el. 3300 ft., 8 May 1920, H. R. Davis 108 (previously determined as A. calycinum & A. alyssoides).

Alyssum szowitsianum is well distinguished from all other

1968]

## Rhodora

naturalized species of *Alyssum* in the United States by having extremely asymmetrically inflated and pubescent silicles. These silicles are tightly adpressed to one another in spikelike infructescences of variable lengths at maturity. This and five other species in Section Alyssum possess an unusual hygrochastic and ombrochorous<sup>1</sup> method of fruit dehiscence and seed dispersal. In the presence of rain, the hygrochastic tissue in the pedicel causes the silicles to move from an ascending or vertical and adpressed position to a spreading or horizontal orientation. In this position, the impact of the rain drops loosens and washes the silicle valves and mucilaginous seed to the ground.

Although closely related in Section Alyssum, A. minus var. micranthum and A. strigosum may be distinguished from each other by the differences in their silicle indumentum. The dimorphic indumentum of A. strigosum consists of tuberculate, long bifurcate and erect hairs intermixed with appressed stellate hairs. However, the silicles of A. minus var. micranthum are covered with monomorphic stellate hairs only, although the unequal lengthed radii may be ascending or erect. Both species illustrate an ombrochorous (without hygrochasty) method of fruit dehiscence and seed dispersal. By this method, the pedicels are brought into a more or less horizontal position early in development. At maturity, the separation tissue between the valves is poorly developed and the mechanical effect of the rain loosens the valves and mucilaginous seeds from the replum.

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<sup>1</sup>cf. Zohary, Palestine Jour. Bot., Jerusalem Series — 1: 151. 1941; op. cit. 2: 125. 1941; op. cit. 4: 158. 1948; op. cit. 4: 239. 1949.



Dudley, T. R. 1968. "Alyssum (Cruciferae) introduced in North America." *Rhodora* 70, 298–300.

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