

on veins and near the margin, the lower face densely tomentulose with white somewhat tangled hairs, and when young particularly softly and densely white tomentulose. Petioles rather densely tomentose 2-5 mm. long. Cymes numerous subsessile or with a peduncle of almost the length of one centimeter. Pedicels densely tomentose-hirtellous. Bracts numerous, linear, hirtellous. Sepals linear-lanceolate, hirtellous, or tomentulose almost or equaling the corolla segments. Corolla 2-3 mm. long and wide, broadly campanulate with spreading whitish segments rounded at the apex. Pods arising in pairs successively from stem and branch cymes, rather small 6.5-11 cm. long subequal, those produced later being larger.

I select as type No. 9733 of the Herbarium of the University collected along a branch of the Michigan Central Railroad near the boat house at Notre Dame. The specimen was collected July 8, 1912. As fruit-type I may designate No. 10304 gathered along the road between Cartier Athletic Field and the Ice-house. The plant is very abundant in this locality, but fruiting specimens are never numerous. What will probably prove to be the same species, I have found on the east shore of Upper Chain Lake, about 10 miles west of South Bend, Ind. I noticed and carefully examined this plant several days before I found the flowering type referred to, but failed to collect specimens. I expected to gather such on the return from the north end of the lake and later decided to botanize on the west shore. As I left this part of the country shortly after, and did not return until late in fall, I have had as yet no occasion to obtain specimens from the Chain Lake region.

*Apocynum cinereum* Nwd. nov. sp.

Planta foliosa cum foliis perparvis *A. isophylli* quoad formam et magnitudinem, sed dense cinereo-glaucous vel etiam pulverulenta et pallida praecipue in facie inferiore, in superiore quidem pallida vel viridescens. Internodi breves 2.5-4 cm. longi; rami quoque pallidi qui inflorescentiam superant. Cymi pedunculati; flores multi, 3-4 mm. longi campanulati. Corollae segmenta angustata, apice obtuso vel rotundato, Corolla infra mediam partem fissa. Sepala lineari-lanceolata, vel lanceolata sinum corollae superantia. Flores albescentes vel viridescens.

Plant leafy with the foliage of *A. isophyllum* Greene, as regards shape and size, but densely cinereous glaucous or even pulverulent,

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pallid especially on the lower face: upper face pallid or slightly greenish. Internodes short, 2.5-4 cm. long; branches also whitish glaucous surpassing the first inflorescence. Cymes peduncled: flowers numerous 3-4 mm. long, campanulate. Corolla segments narrow, obtuse or rounded at the apex and cleft below the middle. Sepals linear-lanceolate or lanceolate surpassing the sinus of the corolla lobes. Flowers whitish or greenish.

Although the foliage of this plant as to size and shape resembles that described by Dr. Greene for *A. isophyllum*,\* the dense white powdery glaucousness of the leaves is strikingly characteristic as vegetative mark. The flowers are very different, campanulate creamy white to greenish with long corolla lobes, and sepals reaching above their sinuses. The plant is one of the most leafy I have seen in the genus. I designate as type a single specimen No. 9167, gathered by myself in the dune region of Lake Michigan at Millers, Lake Co., Indiana. The plant was collected July 8, 1911, and is in the Herbarium of the University of Notre Dame.

*Dept. of Botany.*

*Notre Dame, Ind.*

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## Evactoma.

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BY J. A. NIEUWLAND.

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The plant now generally called *Silene stellata* (Linn.) Aiton, has held a rather uncertain place in botany according to the opinions at least of the older phytographers as is evident from the fact of its having been relegated several times from one genus to another and back again. Linnaeus himself had the plant in *Cucubalus*.<sup>1</sup> Aiton transferred it to *Silene*.<sup>2</sup> Rafinesque<sup>3</sup> considered it as sufficiently characteristic to constitute the type of a new genus which he called *Evactoma*.

<sup>1</sup> Linnaeus, C. Species Plantarum p. 414, (1753). also 2nd Ed. p. 592, (1762).

Hort. Ups. p. 110, (1737) "Cucubalus foliis quaternis."

<sup>2</sup> Aiton, f. Hoetus Kewensis, 3: p. 84 (1811).

<sup>3</sup> Rafinesque, C. S. Autikon Botanikon, pt. 1, Cent. III., p. 23, (1815-1840). The word evidently according to his own explanation of derivation should be written *Euactoma*, from the Greek εὐ, well τέμνω, ἔτομον, (root τομ)-cut ἀκτίς, ray or petal, referring to the deeply cleft petals.

The habit of the plant and certain important characters of the flower, such for example as crownless corolla lend favor to that author's view. The following is Rafinesque's diagnosis:

"*Evactoma* Raf. diff. *Silene* et *Cucubalus* cal. infl. camp. 5 fid. membranosis petalis 5 flabellatis, multifidis non coronatis, stylis 3, caps 3 loc. 3 valvis, fal. verticill. fl. subracem. This deserves to be a G. by habit and characters, the name means well cut star."

*Evactoma stellata* Raf. *Cucub.* et *Sil.* do. O. N. America."

*Silene stellata* (Linn.) Ait, l. c.

*Cucubalus stellatus* Linn. l. c.

The type of the genus is with scarcely any doubt the glabrous membranous leaved plant of Virginia and farther South. The plant of the west and of farther North generally is scabrous pubescent especially on the inflorescence, stem, and leaves. The petals, are more deeply and unequally cleft and the narrow lobes more numerous. This latter character I have found difficult to determine to my utter satisfaction as the flowers of the herbarium specimens are, when not wanting, in rather poor condition. I have examined the specimens in the U. S. National Herbarium, but live material should be compared to obtain quite satisfactory results. I have therefore deemed it advisable to lay not too much stress on this character for the present and consider the northern and western plant as only a variety of the other. Though the specimens of the latter are more numerous in herbaria, I do not hesitate to designate the southeastern plant as the typical *E. stellata*.<sup>1</sup> Most authors before Linnaeus are silent as to the pubescence of the plant and that author himself does not mention it. John Ray, however, one of the first if not the very first unmistakeably to describe the plant designates it as "*Lychnidem Caryophyllum Virginianum gentianae foliis glabris quatuor ex singulis geniculis caulem amplexantibus, flore amplo fimbriato*. Ray, Hist. p. 1895 (1688). From this it is evident that the southern plant was first known in Europe, and found in the botanical gardens there. I need not hesitate then in describing the western and more northern plant as

*Evactoma stellata* var. *scabrella* var. nov.

*Silene stellata* var. *scabrella*.

<sup>1</sup> Bot. Mag. p. 1107, vol. 14. P. Miller, Gard. Dict. Ed. 7, (1759) Morison, R. Hist. 2 p. 577. Banister's Catalogue in Ray 2, p. 1927. J. Ray, 3 p. 246. Petiver. Sic. 30. Clay 7 no. 245 etc.

Planta rigidior et ejus partes imprimis folia, caules, et inflorescentia, scabrellae: folia quoque densiora quam in specie: petala multifida segmentis linearibus irregularibus linearibus: folia margine scabro-ciliata.

The plant though as little branched is less slender than the type.

The following are rather typical specimens of *E. stellata* in the U. S. National Herbarium. The plants were examined in the beginning of September, 1912. All the others with a few rather equivocal exceptions were found to be typical of the variety. I indicate the typical species specimens because they are not so numerous. R. Harper's 1101, Chatahoochie River, Ga. VII, 19, 1901. U. S. H. No. 400362. A. A. Heller's N. of Tucquan, Lancaster, Co. Pa. VII, 24, 1901. U. S. H. No. 406955. Apparently the most northern limit. W. Palmer's, Bedford Co. Va. VII, 24, 1906. U. S. H. No. 605061. W. Pollock's Bucklin Upshur Co., W. Va. VIII, 13, 1895. U. S. H. 261684. T. Kearney, Jr., 618. French Broad River. IX, 17, 1897. U. S. H. No. 313305. Albert Ruth's 197, Lookout Mountain, Ga. VII, 1898. U. S. H. No. 345380. E. C. Townsend's, Spring Mtn. Polk Co., N. Carolina, VII, 23, 1897. U. S. H. No. 341735. C. H. Boynton's 37, Highlands, N. C., VIII, 1888, U. S. H. No. 8830. J. K. Small's Summit Iron Mts. Skull Cap. Symth Co., SW. Va. VIII, 11 and 21, 1892 U. S. H. No. 8841. Miss A. Moore's No. 5 Cades Mt. Tennessee, VIII, 1895. U. S. H. No. 250437. C. L. Pollard's and W. Maxon's, De Kalb Co., Ga. Stone Mt. VIII, 12 and 18, 1900. U. S. H. No. 443001. Thaxter's, Cullowhee, N. C. (ex Herb. A. Gray) 1887 U. S. H. 415904.

As types of the new variety I may designate No. 10541 gathered at Notre Dame, No. 3497 collected by W. W. Calkins, at Berwyn, Ill. (his own No. 181) is in bud and flower, another 7333 collected by the same at Hyde Park, Ill. is typical, also No. 3491, by Dr. F. Powers at Notre Dame, and my own fruit specimens No. 2136 are all examples from my herbarium.

*Notre Dame, Ind.*

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## Nesting Habits of Our Birds.

BY BROTHER ALPHONSUS, C. S. C.

### ROBIN.

*Planesticus migratorius.*

The Robin is the earliest of our birds to build its nest. I have seen nests begun in the middle of March when the weather was mild. These early attempts at nesting, however, often prove disastrous, for very cold days are sure to follow, making it impossible for the birds to sit continuously on the eggs. So the nest is abandoned, and another is built later. The Robin has more than one brood, young birds appearing as late as August.

### PURPLE GRACKLE.

*Quiscalus quiscula.*

The Grackle selects evergreen trees for its nesting place. A grove of pines or spruces will always have a number of Grackles nesting there, and they will soon let any intruder know that they are in possession by flying down toward him in a rather threatening manner. The young appear early and make much noise while waiting for food. After the nesting season the Grackles gather in great flocks.

### MOURNING DOVE.

*Zenaidura macroura.*

The nest of the Dove is found usually in evergreens, and is built so very poorly of a few sticks that one would wonder how the eggs fail to fall to the ground. June is the month that the Dove chooses for nesting, but the young may not be fledged until July. I have found young Doves much earlier, however, a fact that shows the nesting season of the species is sometimes earlier, or that there is more than one brood.

### COWBIRD.

*Molothrus ater.*

The Cowbird is our only bird that never builds a nest of its own. The eggs are stealthily deposited into the nests of other species, which have the additional care of rearing a lusty young Cowbird. Frequently such species as the Chipping Sparrow and the Song Sparrow are imposed upon in this manner, and the

larger Cowbird gets the greater share of the food. Sometimes the nest become so crowded that the stronger Cowbird will rest on the edge of the nest.

#### RED-WINGED BLACKBIRD.

*Agelaius phoeniceus.*

The Red-wing is a bird of the swamps, where it builds its nest, which is built either on the ground or suspended from the rushes. The young are fledged late in June, there being but one brood. During the nesting season, the old birds manifest much concern whenever a pedestrian passes the place where the nest is situated. The males will follow the intruder, scolding all the while, until he has got away from the vicinity of the nest.

#### MEADOWLARK.

*Sturnella magna.*

This well-known species of the meadows places its nest on the ground in some grassy field. About haying-time the young birds are fledged, but sometimes they are still in the nests when the mowing-machine is working. Then there is great excitement among the Meadowlarks, and individuals may be seen flying hither and thither, and showing great alarm by their incessant calling.

#### YELLOW-BILLED CUCKOO.

*Coccyzus americanus.*

The Cuckoo builds its nest sometimes in the top of tall forest trees and again in such a low position as may be found in a young box-elder. A habit peculiar to the bird is laying one egg at a time and hatching it before laying another. To this characteristic is due the fact that young Cuckoos may be seen as late as the end of September. I was astonished one day to see an old Yellowbill feeding a young bird on the 30th of September.

#### RED-HEADED WOODPECKER.

*Melanerpes erythrocephalus.*

Holes in trees or telephone poles are made by the Red-headed Woodpecker as its nesting-place. Walking along a country road, one may find nearly every pole bored by the Red-heads. In this respect they are an injurious species, for the poles used for nesting are often easily broken by wind and weather. While feeding the young, the old birds make continuous trips to and from the nest.