

Visitors to the New York Botanical Garden will find the collection of *Rhipsalis* in Range 1, House No. 7, of the public conservatories.

## NOTES ON THE FLORA OF CENTRAL AND SOUTHERN DELAWARE

BY CHARLES S. WILLIAMSON

So little is known of the flora of central and southern Delaware, that the following notes on specimens collected by members of the Philadelphia Botanical Club, during the summers of 1907 and 1908, may be of interest.

The first trip was taken by Messrs. Brown, Van Pelt and B. Long on September 21, 1908. Its purpose was to find a good location for the Symposium of 1909. The vicinities of Townsend and Millsboro were visited.

The Symposium was held at Georgetown, July 4 to 9. The attendance was very small, there being at no time more than five and on the first and last days only two botanists present. There were no formal meetings, but many interesting plants were found.

The afternoon of July 4 was spent on "the Hammock," about two miles east of Georgetown.

Other botanizing grounds visited in the vicinity of Georgetown were, Morris Pond, a large mill dam about eight miles east of our headquarters, Milton and the salt marshes beyond, Laurel and Bethel, Rehoboth, and Ellendale.

On July 20 Messrs. Van Pelt and Long visited Milford and Ellendale and collected many plants that had been overlooked or that were not in bloom on July 9.

On August 20 the same gentlemen, with Mr. E. B. Bartram, made a trip to Middletown and Smyrna, hoping to find *Alnus maritima* within the club limits. In this they were not successful, but they did find several plants that were new to the herbarium.

Finally, on August 29 I revisited several of the localities at which we had collected during the Symposium.

*Pinus Strobus* L. Rare, observed only east of Milton.

☉ *Torreya*

*Torreya* 9: 160-166, 1909.

*Pinus cchinata* Mill. Between Geo  
*Pinus taeda* L. Abundant everyw  
*Taxodium distichum* (L.) L. C. R  
Laurel; a number of trees, one at l  
No fruit seen.

*Chamaecyparis thyoides* (L.) B.S.P.  
common.

*Potamogeton pulcher* Tuckerm. M  
*Najas gracillima* (A. Br.) Morong.  
Mill pond at Milford.

*Erianthus compactus* Nash. Hamr  
*Manisuris rugosa* (Nutt.) Kuntze.  
railroad ditches and in damp mea  
Georgetown.

*Andropogon argyraeus* Schultes. I  
boro.

*Paspalum plenipilum* Nash? Geor  
*Amphicarpum Amphicarpum* (Pursl  
abundant.

*Brachiaria digitarioides* (Carpenter)  
*Sacciolepis gibba* (Ell.) Nash. Bo  
hoboth. Millsboro.

*Chaetochloa magna* (Griseb.) Scrib.  
*Heleochloa schoenoides* (L.) Host.  
*Sporobolus Torreyanus* (R. & S.) N  
*Gymnopogon ambiguus* (Mx.) B.S.  
*Eragrostis refracta* (Muhl.) Scrib.  
town.

*Cyperus microdontus* Torr. In  
Smyrna Landing.

*Cyperus pseudovegetus* Steud. D  
Ellendale.

*Eleocharis mutata* (L.) R. & S. I  
Delaware.

*Eleocharis Robbinsii* Oakes. Mor  
*Eleocharis tortilis* (Link) Schultes.  
town. Millsboro.

York Botanical Garden will find the collection Range 1, House No. 7, of the public

## THE FLORA OF CENTRAL AND SOUTHERN DELAWARE

BY CHARLES S. WILLIAMSON

of the flora of central and southern Delaware notes on specimens collected by members of the Botanical Club, during the summers of 1907 and 1908.

Excursions were taken by Messrs. Brown, Van Pelt and B. C. Williams, in 1908. Its purpose was to find a good locality for the establishment of a botanical garden in 1909. The vicinities of Townsend and Milton were visited.

A field excursion was held at Georgetown, July 4 to 9. The excursion was small, there being at no time more than five participants, the last days only two botanists present. There were many findings, but many interesting plants were found. On July 4 was spent on "the Hammock," about 10 miles east of Georgetown.

On July 5 the grounds visited in the vicinity of Georgetown, a large mill dam about eight miles east of Georgetown, Milton and the salt marshes beyond, Laurel and Ellendale.

On July 6 Messrs. Van Pelt and Long visited Milford and collected many plants that had been overlooked. The first bloom on July 9.

On July 10 the same gentlemen, with Mr. E. B. Bartram, visited Middletown and Smyrna, hoping to find *Alnus* within club limits. In this they were not successful, but several plants that were new to the herbarium were discovered. On August 29 I revisited several of the localities at which plants were collected during the Symposium.

Rare, observed only east of Milton.

*Pinus cchinata* Mill. Between Georgetown and Laurel.

*Pinus taeda* L. Abundant everywhere.

*Taxodium distichum* (L.) L. C. Rich. Between Bethel and Laurel; a number of trees, one at least four feet in diameter. No fruit seen.

*Chamaecyparis thyoides* (L.) B.S.P. Bethel, Millsboro. Not common.

*Potamogeton pulcher* Tuckerm. Morris Pond.

*Najas gracillima* (A. Br.) Morong. Pond north of Rehoboth. Mill pond at Milford.

*Erianthus compactus* Nash. Hammock east of Georgetown.

*Manisuris rugosa* (Nutt.) Kuntze. Ellendale; abundant along railroad ditches and in damp meadows. Hammock east of Georgetown.

*Andropogon argyraeus* Schultes. Dry sand, Rehoboth. Millsboro.

*Paspalum pleni-pilum* Nash? Georgetown and Ellendale.

*Amphicarpum Amphicarpum* (Pursh) Nash. Ellendale, very abundant.

*Brachiaria digitarioides* (Carpenter) Nash. Millsboro.

*Sacciolepis gibba* (Ell.) Nash. Borders of pond north of Rehoboth. Millsboro.

*Chaetochloa magna* (Griseb.) Scrib. Near Smyrna Landing.

*Heleochoa schoenoides* (L.) Host. Smyrna Landing.

*Sporobolus Torreyanus* (R. & S.) Nash. Ellendale.

*Gymnopogon ambiguus* (Mx.) B.S.P. Ellendale.

*Eragrostis refracta* (Muhl.) Scrib. In water, east of Georgetown.

*Cyperus microdontus* Torr. In field east of Georgetown. Smyrna Landing.

*Cyperus pseudovegetus* Steud. Damp soil, Georgetown and Ellendale.

*Eleocharis nutata* (L.) R. & S. In water, common in eastern Delaware.

*Eleocharis Robbinsii* Oakes. Morris Pond and Milford.

*Eleocharis tortilis* (Link) Schultes. In a wood east of Georgetown. Millsboro.

- Eleocharis Torreyana* Boeckl. Ellendale and Milford.  
*Eleocharis melanocarpa* Torr. Ellendale.  
*Scirpus subterminalis* Torr. Morris Pond.  
*Rynchospora macrostachya* Torr. Milford.  
*Rynchospora axillaris* (Lam.) Britton. Ellendale.  
*Eriocaulon Parkeri* Robinson. Morris Pond, Milford, Rehoboth and Millsboro.  
*Arisaema pusillum* (Peck) Nash. Millsboro.  
*Juncus repens* Michx. Georgetown, Ellendale, and Smyrna, in ditches.  
*Helonias bullata* L. Milford.  
*Mclanthium Virginicum* L. East of Georgetown.  
*Gyrotheca tinctoria* (Walt.) Salisb. The Hammock east of Georgetown.  
*Pogonia diviricata* (L.) R.Br. One fruiting specimen found July 21, 1908, at Ellendale in a meadow a few hundred yards east of the town. Rather abundantly in bloom in the same meadow on June 21, 1909.  
*Tipularia unifolia* (Muhl.) B.S.P. Rather common in a woods about two miles east of Georgetown. In full bloom July 5, 1908.  
*Gyrostachys simplex* (A. Gray) Kuntze. Rehoboth; more common than *G. gracilis* (Bigel.) Kuntze.  
*Gyrostachys praecox* (Walt.) Kuntze. Hammock east of Georgetown. Marsh east of Milton.  
*Blephariglotis lacera* (Mx.) Rydberg. The Hammock, Georgetown.  
*Populus heterophylla* L. Townsend.  
*Myrica cerifera* L. Common around ponds.  
*Hicoria villosa* (Sarg.) Ashe. Milton.  
*Alnus maritima* (Marsh.) Muhl. Rather common. Milford (in bloom July 20), Morris Pond. West of Bethel and Millsboro mostly on the borders of ponds.  
*Castanea pumila* (L.) Mill. Near Noxontown Pond, Middletown.  
*Quercus nigra* L. Very abundant everywhere but no fruit seen in 1908.  
*Quercus Michauxii* Nutt. Georgetown.

- Polygonum Careyi* Olney. Abundant Georgetown.  
*Polygonum Opelousanum* Riddell. Ellendale.  
*Silene alba* Muhl. Near Smyrna Laurel.  
*Cabomba Caroliniana* A. Gray. Milford through the town. Perhaps an escape but luxuriant.  
*Itea Virginia* L. Milford.  
*Prunus angustifolia* Mx. Between Milford and Noxontown Pond.  
*Cracca spicata* (Walt.) Kuntze. Dry roadsides and Laurel.  
*Stylosanthes riparia* Kearney. Near Georgetown.  
*Meibomia viridiflora* (L.) Kuntze. Georgetown. Van Dyke.  
*Meibomia stricta* (Pursh) Kuntze. Common Milford, Ellendale and Georgetown.  
*Lespedeza striata* (Thunb.) H. & A. R. Rydberg.  
*Lespedeza Stuevei* Nutt. Laurel (not in bloom).  
*Lathyrus myrtifolius* Muhl. Near Milton.  
*Clitoria Mariana* L. Along roadside Ellendale.  
*Galactia regularis* (L.) B.S.P. Common Milford.  
*Galactia volubilis* (L.) Britton. Georgetown. Along dry roadsides.  
*Dolicholus erectus* (Walt.) Vail. Georgetown. Along dry roadsides.  
*Oxalis corniculata* L. Smyrna and Ellendale.  
*Linum striatum* Walt. Leaves all or nearly all in bloom east of Georgetown.  
*Polygala cymosa* Walt. Very abundant in Georgetown. Along railroad south of Georgetown.  
*Polygala ramosa* Ell. Very abundant in Georgetown and along the railroad east of Ellendale.  
*Polygala incarnata* L. Along roadside Georgetown. Rehoboth.

oeckl. Ellendale and Milford.  
 Torr. Ellendale.  
 Orr. Morris Pond.  
 Lya Torr. Milford.  
 Lam.) Britton. Ellendale.  
 binson. Morris Pond, Milford, Rehoboth.  
 k) Nash. Millsboro.  
 Georgetown, Ellendale, and Smyrna, in  
 Milford.  
 L. East of Georgetown.  
 Walt.) Salisb. The Hammock east of  
 R.Br. One fruiting specimen found  
 ale in a meadow a few hundred yards  
 er abundantly in bloom in the same  
 place.  
 l.) B.S.P. Rather common in a woods  
 Georgetown. In full bloom July 5, 1908.  
 A. Gray) Kuntze. Rehoboth; more  
 (Bigel.) Kuntze.  
 (Walt.) Kuntze. Hammock east of  
 t of Milton.  
 (Mx.) Rydberg. The Hammock,  
 Townsend.  
 common around ponds.  
 Ashe. Milton.  
 h.) Muhl. Rather common. Milford  
 is Pond. West of Bethel and Millsboro  
 ponds.  
 Mill. Near Noxontown Pond, Middle-  
 re very abundant everywhere but no fruit seen  
 at  
 tt. Georgetown.

*Polygonum Careyi* Olney. Abundant along roadside east of  
 Georgetown.  
*Polygonum Opelousanum* Riddell. Ellendale and Georgetown.  
*Silene alba* Muhl. Near Smyrna Landing.  
*Cabomba Caroliniana* A. Gray. Milford, in stream flowing  
 through the town. Perhaps an escape but very abundant and  
 luxuriant.  
*Itea Virginia* L. Milford.  
*Prunus angustifolia* Mx. Between Milford and Ellendale and  
 at Noxontown Pond.  
*Cracca spicata* (Walt.) Kuntze. Dry roadsides, Georgetown  
 and Laurel.  
*Stylosanthes riparia* Kearney. Near Georgetown.  
*Meibomia viridiflora* (L.) Kuntze. Georgetown, Milford and  
 Van Dyke.  
*Meibomia stricta* (Pursh) Kuntze. Common in dry fields,  
 Milford, Ellendale and Georgetown.  
*Lespedeza striata* (Thunb.) H. & A. Rehoboth and Ellendale.  
*Lespedeza Stuevei* Nutt. Laurel (not in bloom), Rehoboth, in  
 bloom.  
*Lathyrus myrtifolius* Muhl. Near Milton.  
*Clitoria Mariana* L. Along roadside between Milford and  
 Ellendale.  
*Galactia regularis* (L.) B.S.P. Common.  
*Galactia volubilis* (L.) Britton. Georgetown and Laurel, along  
 dry roadsides.  
*Dolicholus erectus* (Walt.) Vail. Georgetown and Laurel,  
 along dry roadsides.  
*Oxalis corniculata* L. Smyrna and Ellendale, along roadsides.  
*Linum striatum* Walt. Leaves all or nearly all alternate, com-  
 mon east of Georgetown.  
*Polygala cymosa* Walt. Very abundant in the hammock east  
 of Georgetown. Along railroad south of Ellendale.  
*Polygala ramosa* Ell. Very abundant in meadow with *Pogonia*  
 and along the railroad east of Ellendale.  
*Polygala incarnata* L. Along roadsides, Georgetown and  
 Rehoboth.

*Polygala Mariana* Mill. Georgetown and Ellendale, in both damp and dry soil.

*Polygala lutea* L., *P. cruciata* L., and *P. Nuttallii* were also common.

*Crotonopsis linearis* Mx. Common in both damp and dry soil, in meadows and in woods at Ellendale and Georgetown.

*Rhus Toxicodendron* L. Laurel, along roadside.

*Kosteletzkya Virginica* (L.) A. Gray. Salt marsh east of Milton, Rehoboth.

*Hypericum adpressum* Bart. Ellendale.

*Hypericum virgatum* Lam. Very abundant in Ellendale, and in the Hammock, Georgetown.

*Triadenum petiolatum* (Walt.) Britton. Milford, Morris Pond and Millsboro.

*Elatine Americana* (Pursh) Arn. Near Noxontown Pond. Some of the plants are very large, forming rosettes eight inches in diameter.

*Viola Brittoniana* Pollard? Rehoboth, leaves very leathery.

*Rhexia aristosa* Britton. Abundant in ditches along railroad east of Ellendale.

*Ludwigia sphaerocarpa* Ell., *L. linearis* Walt. and *L. hirtella* Raf. Abundant at Ellendale and in the Hammock. Georgetown.

*Myriophyllum pinnatum* (Walt.) B.S.P. Morris Pond.

*Hydrocotyle umbellata* L. and *H. verticillata* Thunb. Borders of pond south of Rehoboth.

*Pyrola secunda* L. Milford.

*Chironanthus Virginica* L. Common.

*Sabbatia campanulata* (L.) Torr. In the meadow east of Ellendale.

*Gentiana puberula* Mx.? One clump (not quite in bloom) along railroad south of Ellendale. The rough stems, long calyx and corolla lobes and stamens free, even in the bud seem to designate this species. On the trip of June 21, 1909, a large number of plants, which may be this species, were noted in the meadow with the Pogonia.

*Bartonia Virginica* (L.) B.S.P. and *B. laucolata* Small. Ellendale. The latter more common, growing as a twining vine.

*Limnanthemum lacunosum* (Vent.) Gri  
*Limnanthemum aquaticum* (Walt.) Bri  
Milford.

*Apocynum pubescens* R. Br. Near Ge

*Apocynum Milleri* Britton. Bethel.

*Asclepias rubra* L., *A. decumbens* L., a  
found near Georgetown and *A. verticilla*  
*Acerates Floridana* (Lam.) Hitchc. Ellendale.

*Vincetoxicum hirsutum* (Mx.) Britton.

*Physostegia Virginiana* (L.) Benth. I  
town. Perhaps introduced.

*Stachys Atlantica* Britton. Ellendale.

*Koellia aristata* (Mx.) Kuntze. Dry

*Gratiola sphaerocarpa* Ell. Ellendale

*Gerardia linifolia* Nutt. Ellendale,  
Georgetown.

*Pedicularis lanceolata* Mx. Townsenc

*Utricularia juncea* Vahl. Millsboro.

*Utricularia resupinata* B. D. Greene  
In bloom July 20.

*Utricularia inflata* Walt. Below the c

*Utricularia radiata* Small. Common i  
and Ellendale.

*Utricularia cleistogama* (A. Gray) Brit  
Georgetown.

*Utricularia fibrosa* Walt., *U. gibba* L.  
*purpurea* Walt., also occurred at Morr  
common in the railroad ditches south of

*Tecoma radicans* (L.) D.C. Common

*Ruellia parviflora* (Nees) Britton.  
edges of thickets at Rehoboth.

*Oldenlandia uniflora* L. Millsboro  
much taller than those found in New Je

*Galium pilosum punctulosum* (Mx.) T.  
Georgetown.

*Viburnum subtomentosum*. Near Nox

*Lobelia elongata* Small? Millsboro.

hill. Georgetown and Ellendale, in both  
*P. cruciata* L., and *P. Nuttallii* were also

Mx. Common in both damp and dry soil,  
 also at Ellendale and Georgetown.

*L. Laurel*, along roadside.

*A. (L.) A. Gray*. Salt marsh east of  
 m Bart. Ellendale.

Lam. Very abundant in Ellendale, and  
 Georgetown.

m (Walt.) Britton. Milford, Morris Pond

(Pursh) Arn. Near Noxontown Pond.  
 very large, forming rosettes eight inches

ollard? Rehoboth, leaves very leathery.  
 ton. Abundant in ditches along railroad

*arpa* Ell., *L. linearis* Walt. and *L. hirtella*  
 Ellendale and in the Hammock. Georgetown.

*tum* (Walt.) B.S.P. Morris Pond.

*ta* L. and *H. verticillata* Thunb. Borders  
 both.

Milford.

*ica* L. Common.

*ta* (L.) Torr. In the meadow east of

Mx.? One clump (not quite in bloom)  
 of Ellendale. The rough stems, long calyx  
 and stamens free, even in the bud seem to  
 be. On the trip of June 21, 1909, a large  
 which may be this species, were noted in the  
 onia.

*(L.) B.S.P.* and *B. lanceolata* Small.  
 or more common, growing as a twining

*Limnanthemum lacunosum* (Vent.) Griseb. Rehoboth.

*Limnanthemum aquaticum* (Walt.) Britton. Morris Pond and  
 Milford.

*Apocynum pubescens* R. Br. Near Georgetown.

*Apocynum Milleri* Britton. Bethel.

*Asclepias rubra* L., *A. decumbens* L., and *A. variegata* L. were  
 found near Georgetown and *A. verticillata* L. at Rehoboth.

*Accrates Floridana* (Lam.) Hitchc. Along railroad south of  
 Ellendale.

*Vincetoxicum hirsutum* (Mx.) Britton. Near Noxontown Pond.

*Physostegia Virginiana* (L.) Benth. Roadside east of George-  
 town. Perhaps introduced.

*Stachys Atlantica* Britton. Ellendale.

*Koellia aristata* (Mx.) Kuntze. Dry roadsides, Georgetown.

*Gratiola sphaerocarpa* Ell. Ellendale and Milford.

*Gerardia linifolia* Nutt. Ellendale, and in the hammock,  
 Georgetown.

*Pedicularis lanceolata* Mx. Townsend.

*Utricularia juncea* Vahl. Millsboro.

*Utricularia resupinata* B. D. Greene. Milford. Abundant.  
 In bloom July 20.

*Utricularia inflata* Walt. Below the dam Morris Pond.

*Utricularia radiata* Small. Common in ditches. Georgetown  
 and Ellendale.

*Utricularia cleistogama* (A. Gray) Britton. In the hammock,  
 Georgetown.

*Utricularia fibrosa* Walt., *U. gibba* L., *U. subulata* L., and *U.*  
*purpurea* Walt., also occurred at Morris Pond. The last was  
 common in the railroad ditches south of Ellendale.

*Tecoma radicans* (L.) D.C. Common especially at Rehoboth.

*Ruellia parviflora* (Nees) Britton. Not uncommon on the  
 edges of thickets at Rehoboth.

*Oldenlandia uniflora* L. Millsboro and Rehoboth. Plants  
 much taller than those found in New Jersey.

*Galium pilosum punctulosum* (Mx.) T. & G. Sandy roadsides  
 Georgetown.

*Viburnum subtomentosum*. Near Noxontown Pond.

*Lobelia elongata* Small? Millsboro.

*Lobelia paludosa* Nutt. Along railroad east of Ellendale.  
*Lobelia Canbyi* A. Gray. Very abundant at Ellendale and the Hammock at Georgetown.

*Lobelia puberula* Mx. Georgetown and Ellendale.

*Chondrilla juncea* L. Smyrna Landing.

*Elephantopus nudatus* A. Gray. Sandy woods, Georgetown, Rehoboth and Millsboro.

*Sclerolepis uniflora* (Walt.) Porter. Very common in ditches, Ellendale and the Hammock, Georgetown.

*Heterotheca subaxillaris* (Lam.) Britt. & Rusby. Millsboro. Very abundant between Georgetown and Laurel. One specimen east of Georgetown.

*Boltonia asteroides* (L.) L'Her. Ellendale and Georgetown.

*Pluchea foetida* (L.) B.S.P. One colony in the dune hollows north of Rehoboth.

*Coreopsis rosea* Nutt. Ellendale, Milford and Rehoboth. Plants smaller than New Jersey specimens.

*Senecio tomentosus* Mx. Common, Georgetown, Ellendale and Rehoboth.

*Carduus Virginianus* L. One specimen along roadside east of Georgetown with the *Heterotheca*; perhaps like that plant common further west.

Specimens of all the plants mentioned, except *Carduus Virginianus* L. are deposited in the Herbarium of the Academy of Natural Sciences, Philadelphia.

GIRARD COLLEGE.

## THE GENERIC NAME WEDELIA

BY T. D. A. COCKERELL

The receipt of Mr. Standley's admirable revision of the Allioniaceae of the United States called up a question as to the propriety of using *Wedelia* as the name of a genus in that family. *Wedelia* Loefl., *Iter. Hisp.* 180. 1758, is clearly a hyponym, since it includes no named species. According to the *Index Kewensis*, combinations under *Wedelia* occur in *Linn. Syst. ed.* 10, 890, but Dr. Barnhart has kindly looked up this reference,

and finds that Linné cites Loefling, but does not mention his generic names. In the mean time *Enum. Pl. Carib.* 8: 28. 1760, was proposed for the Compositae which is current to-day, with *Wedelia* Loefl., *Reise* 240. 1766, had an *Allionia incarnata* L., but this is several years before Jacquin's publication.

The type of *Allionia* Loefl., L., *Syst. ed.* 10, is *A. violacea* L., as Mr. Standley states. The name *Allioniaceae*, is thus left nameless, and *Wedelia* proposed. The species, with references to Standley's work (*Contr. U. S. Nat. Herb.* 1: 109. seq. 1909) are as follows:

*Wedeliella cristata*: *Wedelia cristata* Standley, p. 332.

*Wedeliella glabra*: *Wedelia glabra* (Choi) Standley, p. 332.

*Wedeliella incarnata*: *Wedelia incarnata* Standley, p. 332. Type of genus.

*Wedeliella incarnata anodonta*: *Wedelia incarnata* Standley, p. 333.

*Wedeliella incarnata villosa*: *Wedelia incarnata* Standley, p. 333.

*Wedeliella incarnata nudata*: *Wedelia incarnata* Standley, p. 334.

I am greatly indebted to Dr. N. L. Barnhart for advice and reference.

## REVIEWS

Walton's Wild Flowers and Fruits

This practical guide to the wild flowers of the United States is an earlier popular book in arranging the plants in keys. Much time is saved, however, in finding the plants by the addition of a series of easy and ingenious keys — one for each color group. These keys include such characters as the manner of growth (climber, etc.), the flower and leaf arrangement, the number of flowers, the presence of thorns. The keys and the illustrations are excellent.

\* Walton, G. L. *Practical Guide to the Wild Flowers of the United States*. Pp. 198. 1909. J. B. Lippincott Company, Philadelphia.