

*Quercus Phellos* L. Willow Oak.

This form has been recorded as found in Gibson, Posey and Knox Counties.

Concerning the occurrence of this species in this region, Dr. Ridgway says: "This species I give with some doubt, not being quite positive that it occurs. I have seen, however, along the road between Mount Carmel and Olney several trees which, at the time of inspection, I unhesitatingly decided to be *Q. Phellos*, but not having seen it since, while Dr. Schneck has not recorded it, I place the interrogation mark before it."<sup>1</sup> Since the publication of the Catalogue Dr. Schneck writes me that "a very narrow-leaved form of *Q. imbricaria* has probably been mistaken for *Q. Phellos*." If this be true, there exists no definite record of the occurrence of *Q. Phellos* in Indiana. Collectors in the southwestern counties should examine carefully as to the correctness of this view.

*Celtis pumila* (Muhl.) Pursh.

"Rocky banks of Blue River" (J. Schneck, M. D.). This shrub-like Hackberry, undoubtedly occurs in our area. It is included by Britton and Brown (Vol. 1, p. 526) under *C. occidentalis* L., which is described as a "shrub or a tree." Sargent also includes under *C. occidentalis*, of which he says: "A polymorphous species; the low shrub form of hillsides and sand dunes is the *C. pumila* of Pursh." The reasons for not maintaining *pumila* in at least varietal rank are not clearly apparent. The form, however, is in the Catalogue, by inclusion in *C. occidentalis*.

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 SOME MID-SUMMER PLANTS OF SOUTH-EASTERN TENNESSEE.

BY STANLEY COULTER.

The center from which the collections here reported were made was Mt. Nebo in the Chilhowee Mountains. It is about ten miles to the east of Maryville, which gives the nearest railway communication. From the summit of the mountain the eye reaches westward over a beautiful plain, to the Cumberland Mountains, while twenty miles to the east there arise the peaks of the Great Smoky Mountains. The region lying between the Chilhowee and Great Smoky Mountains is practically virgin, only relatively small areas having been taken for agricultural purposes. The

<sup>1</sup>Ridgway, Robert.—Notes on the Native Trees of the Lower Wabash and White River Valleys, in Illinois and Indiana. *Proc. U. S. Natl. Mus.*, 1882, p. 83.

time of the visit was the month of August, and while the object of the trip was not botanical, a few plants were collected and preserved as well as was possible under the conditions.

At the base of the Chilhowees runs Little River, its banks thickly clothed with timber, the most prominent form both as to size and number being the sycamore. More interesting was the fact that the mistletoe, which with us is found chiefly upon the elm, the honey locust and the oak, had therè its favorite resting place upon the sycamore. Upon the western slopes of the Chilhowees, the chestnut was the characteristic forest tree, reaching very often a trunk diameter of from five to seven feet. In the coves and upon the western slopes of the Great Smokies, pines made up the forests, and we drove through miles of these forests which had as yet been free from the lumberman's axe. Near the summits of the Great Smokies the trees were for the most part stunted beeches, not more than fifteen to twenty feet high or with a trunk diameter exceeding eight inches. Among the pines there grew in abundance a bright yellow orchid which I was unable to collect, but took to be either *Habenaria cristata* or *lacera*. Upon the summit of Thunder Head in the wet places the Indian pipe grew in great masses, covering acres with its graceful, snow-white blossoms. In the lower levels and encroaching everywhere upon the cultivated areas the most attractive plant was the passion flower (*Passiflora incarnata*), known locally as maypop. It was one of the most annoying weeds of the region. The masses of rhododendrons and azaleas, though past the glory of their bloom, added another feature, strange to northern eyes. These plants practically covered the lower stretches of the mountain, and when in full bloom must have made a most brilliant landscape. No attempt was made to secure a complete collection of the plants of the region, only those being collected which promised to "preserve easily," or were of interest for some special reason.

Thanks are due to Mr. H. B. Dorner, a graduate student in botany at Purdue University, for a critical study of the collection.

*Juniperus Virginiana* L. Red Cedar.

Common over Chilhowee and Great Smoky Mountains.

*Panicum capillare* L. Witch Grass. Tumble weed.

Abundant and annoying in cultivated areas.

*Commelina nudiflora* L. Creeping Day-flower. (*C. communis* L.)

In moist places at base of mountains.

*Stenanthium gramineum* (Ker) Morong. (*S. angustifolium* Gray.)

Found chiefly well up the mountain sides.

*Aletris farinosa* L. Star grass. Colic-root.

In situations similar to the preceding.

*Pogonia trianthophora* (Sw.) B. S. P. Nodding Pogonia. (*P. pendula* Lindl.)

From base of mountain up to 2,500 feet.

*Gyrostachys gracilis* (Bigel.) Kuntze. Slender Ladies' Tresses. (*Spiranthes gracilis* Bigel.)

Usually well up the side of the mountain.

*Tipularia unifolia* (Muhl.) B. S. P. Crane-fly Orchis. (*T. discolor* Nutt.)

Not unfrequent on western slope of Mt. Nebo.

*Carpinus Caroliniana* Walt. Water Beech. Blue Beech. (*C. Americana* Michx.)

Along streams throughout mountains.

*Polygonum Persicaria* L. Lady's Thumb.

On Pine Top, Blount County, Tenn.

*Silene stellata* (L.) Ait. Starry Champion.

Abundant in woods throughout the mountains.

*Anychia Canadensis* (L.) B. S. P. Slender Forked Chickweed.

*Clematis Virginiana* L. Virgin's Bower.

Abundant along Little River, near Mt. Nebo.

*Cassia nictitans* L. Wild Sensitive Plant.

Extremely abundant. In places covering acres to the practical exclusion of other plants.

*Cassia Tora* L. Low Senna. (*C. obtusifolia* L.)

On banks of Little River, near Mt. Nebo.

*Cassia Marylandica* L. American Senna.

Found only about the Mountain House on Mt. Nebo, at an altitude of about 2,500 feet.

*Stylosanthes biflora* (L.) B. S. P. Pencil Flower. (*S. elatior* Sw.)

*Meibomia nudiflora* (L.) Kuntze. (*Desmodium nudiflorum* D. C.)

*Lespedeza repens* (L.) Bart. Creeping Bush-clover. (*L. repens* T. and G.)

*Lespedeza frutescens* (L.) Britton. (*L. violacea sessiliflora* Chapm.)

*Lespedeza hirta* (L.) Ell. Hairy Bush Clover. (*L. hirta* L.)

*Lespedeza striata* (Thunb) H. and A. Japan Clover.

*Bradburya Virginiana* (L.) Kuntze. Spurred Butterfly Pea. (*Centrosema Virginiana* Benth.)

Very abundant in the drier soils.

*Rhynchosia erecta* (Walt) D. C. (*R. tomentosa erecta* T. and G.)

*Oxalis filipes* Small. Slender Yellow Wood-sorrel.

On Mt. Nebo, on western slope, August, 1892.

*Oxalis stricta* L. Upright Yellow Wood-sorrel.

Abundant in moist soils along banks of Little River.

*Polygala Curtissii* A. Gray.

*Polygala alba* Nutt. White Milk-wort.

Very abundant in open places on Mt. Nebo.

*Phyllanthus Carolinensis* Walt.

*Acalypha gracilens* Gray. Three-seeded Mercury.

Abundant in thickets.

*Euphorbia nutans* Lag. Upright Spotted Spurge. (*E. hypericifolia* Gray.)

*Euphorbia corollata* L. Flowering Spurge.

Common throughout mountains.

*Impatiens biflora* Walt. Spotted Touch-me-not. (*I. fulva* Nutt.)

Near Little River, Blount County, Tenn.

*Rhamnus Caroliniana* Walt. Carolina Buckthorn.

Along banks of Little River, Blount County, Tenn.

*Sida spinosa* L.

Common throughout mountains and about cultivated fields.

*Ascyrum hypericoides* L. St. Andrew's Cross. (*A. Crux-Andree* L.)

*Hypericum adpressum* Bart. Creeping St. John's-wort.

*Hypericum virgatum* Lam. (*H. angulosum* Michx.)

*Hypericum mutilum* L. Dwarf St. John's-wort.

*Sarothra gentianoides* L. Orange-grass. Pine-weed. (*Hypericum Sarothra* Michx.)

*Ludwigia alternifolia* L. Rattle-box.

*Angelica villosa* (Walt) B. S. P. (*Archangelica hirsuta* T. and G.)

*Cornus florida* L. Flowering Dogwood.

On Pine-top mountain at 2,700 feet altitude.

*Rhododendron maximum* L. Great Laurel. Rose Bay.

Common in Great Smoky and Chilhowee mountains, along streams, forming dense thickets or "sticks" near the base.

*Xolisma ligustrina* (L.) Britton. (*Andromeda ligustrina* Muhl.)

*Oxydendrum arboreum* (L.) D. C. Sour-wood. Sorrel-tree.

*Vaccinium virgatum* Ait. Southern Black Huckleberry.

*Mohrodendron Carolinum* (L.) Britton. Silver-bell Tree. (*Halesia tetraptera* L.)

*Ipomoea pandurata* (L.) Meyer. Wild Potato Vine.

Abundant on Mt. Nebo.

*Ipomoea pandurata hastata* Chapm (?).

More abundant than the type especially in the lowlands bordering upon Little river.

*Cuscuta arvensis* Beyrich. Field Dodder.

On Pennyroyal, at foot of Mt. Nebo.

*Hedeoma pulegioides* (L.) Pers. Pennyroyal.

*Solanum Carolinense* L. Horse-nettle.

Banks of Little River, and in adjoining cultivated fields. Locally known as "Tread-softs."

*Dasystoma laevigata* Raf. (*Gerardia quercifolia integrifolia*, Benth.)

*Ruellia ciliosa* Pursh. (*Dipteracanthus ciliosus* Nees.)

*Houstonia cœrulea* L. Bluets. Innocence. (*Oldenlandia cœrulea* Gray.)

*Houstonia purpurea* L. (*Oldenlandia purpurea* Gray.)

*Diodia teres* Walt. Rough Button-weed.

*Lobelia amona glandulifera* A. Gray. Southern Lobelia.

Abundant on Mt. Nebo.

*Lobelia inflata* L. Indian Tobacco.

Very common throughout the mountains.

*Lacinaria squarrosa* (L.) Hill. Blazing Star. Colic-root. (*Liatris squarrosa* Willd.)

On each side of Pine Top, Chilhowee mountains.

*Graphalium obtusifolium* L. Sweet Balsam. (*G. polycephalum* Michx.)

Near base of Mt. Nebo.

*Silphium terebinthinaceum* Jacq. Prairie Dock. (*S. compositum* Michx.)?

On Pine Top, Chilhowee Mountains in considerable abundance.

*Achillea millefolium* L. Yarrow.

Abundant throughout the mountains.

The nomenclature of the article is that of Britton and Brown's Illustrated Flora of the Northern States and Canada, the names in parenthesis being those used by Chapman in his Flora of the Southern United States, edition of 1872.

While Dr. Gattinger has done excellent work in the collation of the flora of Tennessee, there remains in the southeastern counties, especially in the deeper coves, large areas that as yet are practically botanically unknown. The remoteness of these regions from ordinary lines of travel, and the unprogressive character of the inhabitants, have joined to keep this area in a nearly virginal state. No collecting tour could be more profitable botanically than one through the coves and mountain ravines between the Great Smoky and Chilhowee Mountains.