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ABSTRACT: A key is given to the 7 species of *Paronychia* (Caryophyllaceae) recognized for Florida. Habitat, distribution, and synonymy are included. *Paronychia baldwinii* (T. & G.) Fenzl in Walp. is seen as consisting of 2 subspecies, with ssp. riparia (Chapm.) Ward given a new status. *Paronychia erecta* (Chapm.) Shinnars is treated as of 2 varieties, with var. corymbosa (Small) Ward in a new status. *Paronychia chartacea* Fern. is endemic to central peninsular Florida. Other species are *P. americana* (Nutt.) Fenzl in Walp., *P. herniarioides* (Michx.) Nutt., *P. patula* Shinnars and *P. rugelii* (Chapm.) Chapm. *Paronychia fastigiata* (Raf.) Fern. is excluded.

The species here placed in the genus *Paronychia* have been assigned in the past to a plethora of segregate genera. J. K. Small (Manual of the Southeastern Flora, 1933) carried this fragmentation to a point close to its theoretical limit, with several genera represented by a single species. In Florida he recognized *Anychia*, *Anychiastrum*, *Gastronychia*, *Gibbesia*, *Nyachia*, *Odontonychia*, and *Siphonychia*, with true *Paronychia* restricted to areas farther north. Two more conservative treatments by E. L. Core (Jour. Elisha Mitchell Sci. Soc. 55:339-345. 1939; Amer. Midl. Nat. 26:369-397. 1941) reduced the Florida species to *Siphonychia* (including *Gibbesia* and *Odontonychia*) and *Paronychia* (containing the remaining segregates). L. H. Shinnars (Sida 1:101-103. 1962), completing the final step of these generic reductions, pointed out the superficiality of the differentiating characters, and included *Siphonychia* in the comprehensive genus *Paronychia*.

Two new combinations are necessary, to give appropriate measure of the variability observed in two of the Florida species.

*Paronychia baldwinii* (T. & G.) Fenzl in Walp.

ssp. riparia (Chapm.) Ward, comb. & stat. nov.  
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Basionym: *Paronychia riparia* A. W. Chapman, Flora  
of the Southern United States, 2nd ed., 607.  
1883.

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<sup>1</sup> This paper is Florida Agricultural Experiment Station Journal Series No. 397.



*Paronychia baldwinii* is best known as a delicate annual with strongly ribbed, marginally and dorsally ciliate sepals, that appears in woodland clearings, on river banks, or as an ephemeral weed in cultivated fields. Occasionally plants are encountered that are deep taprooted perennials with glabrous sepals, and both Chapman and Core considered these to constitute a related species, *P. riparia*. Although Shinnars rejected even varietal recognition of this second form with the statement, "pubescence varies quite independently of apparent duration," this is definitely not the case in the specimens available for the present study. A map of *P. riparia* provided by Core shows an arc of stations from the Apalachicola area of western Florida, north and eastward through Georgia. This distributional pattern is similar to that of certain other southeastern taxa (e.g., *Helianthemum rosmarinifolium*, *Uvularia floridana*) and corresponds to a belt of sandy soils above 200 ft. elevation. *Paronychia baldwinii* is more widespread and is largely on the younger Coastal Plain soils. It is possible that the glabrous perennial known as *P. riparia* represents an old biotype from which the more vigorous and pubescent annual *P. baldwinii* has been derived. The magnitude and biological significances of these differences are more than varietal.

Paronychia erecta (Chapm.) Shinnars

var. *corymbosa* (Small) Ward, comb. & stat. nov.

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Basionym: Siphonychia corymbosa J. K. Small, Bull.

Torrey Bot. Club 24:337. 1897.

*Paronychia erecta* is a species with variable pubescence. Small and Core formalized the differences in stem pubescence with specific epithets, while Shinnars saw them as best-unnamed groupings of Mendelian characters. Yet in Florida all specimens examined in this study fell satisfactorily into one of two pubescence-states which have somewhat different ranges and reasonably merit recognition at the varietal level.

In 1933 Small recognized a supposed close relative of *P. erecta* with a bristly-pubescent calyx-tube, as a species under the name *Odontonychia interior*. He based it upon a specimen from along the Suwannee River, Dixie County, Florida. Core later treated this entity as *Siphonychia interior* and assigned it a range from near Lak City, Columbia County, southward to Citrus County. Shinnars, without explanation, placed these names in synonymy under *P. rugelii*, a species whose distribution encompasses this range but which is morphologically quite distinct from *P. erecta*. Shinnars' disposition of these names seems appropriate, for two of the sheets cited by Core as *S. interior* (Citrus Co.: *Hitchcock* 1553 (F); Suwannee Co.: *Hitchcock* 1552 (F)) have been examined by Richard Baker (*in litt.*) and have been found to be indistinguishable from *P. rugelii*.



Paronychia Adans.

## Whitlow-worts

1. Flowers about 0.5 mm. long; sepals deeply hooded at apex, the apical 0.1 mm. white or yellow, sharply delimited from the dark (drying maroon) basal portion; awn absent; small depressed annual; dry open scrub, local; central peninsular Florida (Orange, Polk, Highlands counties), endemic. June - September. [*Nyachia pulvinata* Small; *Paronychia pulvinata* (Small) Pax & Hoffm.]

P. chartacea Fern.

1. Flowers 1 - 2 mm. long; sepals plane or longitudinally inrolled or somewhat hooded at apex, uniformly colored or with indefinite longitudinal striping; awn present near sepal apex, or absent.
2. Sepals ciliate along margins or with pubescence irregularly scattered over back (in *P. baldwinii* ssp. *riparia*, nearly glabrous, but sepals with 3 longitudinal ribs).

3. Sepals not clearly ribbed, lanceolate, tapering uniformly to a terminal awn, rather evenly strigose; small sub-prostrate cushion-plant; dry sand ridges and scrub, local; peninsular Florida, from Gilchrist and Clay counties south to Highlands County. May - July. [*Gastronychia herniarioides* (Michx.) Small]

P. herniarioides (Michx.) Nutt.

3. Sepals strongly 3-ribbed, broadly ovate to oblong, abruptly tapering, with a short stout awn on dorsal surface near apex, coarsely and sparingly pubescent, or glabrous with only occasional cilia along margins; hammocks, river banks, sand dunes, and waste areas, frequent; north Florida, south to mid-peninsula (Polk County). June - September. [*Anychiastrum Baldwinii* (T. & G.) Small; *A. riparium* (Chapm.) Small; *Paronychia riparia* Chapm.]

P. baldwinii (T. & G.) Fenzl in Walp.

4. Annual; sepals pubescent dorsally; stems uniformly recurved-pilose; often a vigorous adventive; range as above.

ssp. baldwinii

4. Perennial, the herbaceous stems spreading from crown of a deep taproot; sepals nearly glabrous, with marginal cilia few or lacking; stems glabrous or pubescent only in longitudinal bands; in Florida apparently restricted to dry woods on bluffs along Apalachicola River, north-central panhandle.

ssp. riparia (Chapm.) Ward



2. Sepals glabrous, or pubescent only at the base, not ribbed.

5. Sepals glabrous to base; awn absent; cespitose perennial with ascending annual stems; coastal dunes, panhandle Florida (Escambia to Wakulla counties). March - November. [*Odontonychia erecta* (Chapm.) Small; *O. corymbosa* (Small) Small; *Siphonychia corymbosa* Small]

P. erecta (Chapm.) Shinnery

6. Stems glabrous, often glaucous; range as above.

var. erecta

6. Stems minutely gray-pubescent; range east from Bay County.

var. corymbosa (Small) Ward

5. Sepals densely pubescent on basal portion, glabrous above; awn absent or reduced to a small tooth near apex of sepal.

7. Pubescent area of sepal limited to basal 1/3 or less; sepals narrowed toward apex, terminating in a short dorsal tooth or awn; stem uniformly pubescent with hairs descending.

8. Glabrous portion of sepal more than 1.1 mm. long; stem erect, branching symmetrical and dichotomous (the resulting plant often very square or rectangular); annual; high pineland and dry disturbed soils, frequent in northwest peninsular Florida (Taylor to Alachua counties), occasional south to Highlands County. July - October. [*Siphonychia Rugelii* Chapm.; *Gibbesia Rugelii* (Chapm.) Small; *Odontonychia interior* Small; *Siphonychia interior* (Small) Core]

SAND-SQUARES.

P. rugelii (Chapm.) Chapm.

8. Glabrous portion of sepal 0.8 mm. long; stem spreading or ascending, with branching dichotomous but unevenly so; annual or rarely short-lived perennial; scrub, high pineland, and dry disturbed areas, frequent; north Florida, south to Highlands County. July - September. [*Siphonychia diffusa* Chapm.]

P. patula Shinnery

7. Pubescent area of sepal nearly 1/2 of entire length; sepals broadly rounded and hooded, often rolled down and inward, the flower thus appearing truncated; awn absent; stem glabrous or one side with curled hairs;

sprawling annual; scrub, coastal dunes, and dry sandy areas, infrequent; peninsular Florida. March - October. [*Siphonochia americana* (Nutt.) T. & G.; *S. pauciflora* Small]

P. americana (Nutt.) Fenzl in Walp.

#### Excluded Species

P. fastigiata (Raf.) Fern. [*Anychia polygonoides* Raf.] No specimens have been seen from Florida. This northern species was reported for Florida by Core (Amer. Midl. Nat. 26:377. 1941), but no specimens were cited. The only near-by collection cited as *P. fastigiata* (Fishriver Bay, Baldwin Co., Ala.: Mohr (F)) is described by Richard Baker (*in litt.*) as appearing to be *P. baldwinii*, a reasonable identification since Core so named another collection (M) from the same location.





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PARONYCHIA CARYOPHYLLACEAE." *Phytologia* 35, 414–418.

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