

A NEW SPECIES OF LECHEA (CISTACEAE)  
FROM PENINSULAR FLORIDA

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A dozen years ago a strikingly different *Lechea* was noted (*Rhodora* 63: 117. 1961.) among collections from southern Florida. It then seemed unwise, however, to describe the population that they represent as a distinct new taxon since the specimens available were not as complete or mature as would be desired in proposing a new entity in such a perplexing and technical genus. However, additional collections from southern Florida and the low-keyed but persistent hints from Dr. Olga Lakela that something wasn't quite satisfactory with available treatments finally prodded me into taking another look. Her own collections have largely eliminated one of my reservations about formally proposing a new taxon, although additional collections from throughout the growing season are still very much to be desired. Practically nothing is known of the plants except in the fruiting stage and although that is the most important stage for the accurate identification of members of this genus, it still would be most desirable to know something more about the vegetative features of this species. Leaves in this species are almost completely lacking by the time fruits are ripening. Still it seems probable that more of a stimulus for additional collections of this taxon and of the other highly distinctive representatives of the genus in peninsular Florida will be forthcoming if the taxon is formally proposed now than if we wait for more collections.

KEY TO THE PENINSULAR FLORIDIAN SPECIES OF LECHEA

1. Pubescence of aerial stems mostly strongly divergent and spreading. . . . . 2.

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2. Internal sepals conspicuously V- or U-shaped in cross-section with thin scarious margins and a roughened, often sparsely pilose keel (the sepal otherwise glabrous); leaves often over 1.5 cm. long; capsule thin-walled, readily splitting into 3 valves at maturity, subglobose, about equaling the calyx in length. . . . . 1. *L. mucronata* Raf. (*L. villosa* Ell.).
2. Internal sepals but slightly bowed in cross-section with texture appearing uniform and pubescence scattered across surface; leaves all less than 1 cm. long; capsule thick-walled, indehiscent, ellipsoid or somewhat rounded- barrell-shaped, exerted from the calyx for at least 1/3-1/2 its length. . . . .  
. . . . . 2. *L. divaricata* Shuttlew. ex Britt.
1. Pubescence of aerial stems mostly closely appressed or lacking. . . . . 3.
3. External sepals equaling or exceeding the internal sepals in length. . . . . 4.
4. External sepals at least one-fifth longer than the inner sepals and usually equaling or exceeding the capsule in length; capsule equaling or exceeding the inner sepals by not more than one-fifth its length; cauline leaves usually elliptic to elliptic-oblong, usually less than 5 times as long as wide, those below the inflorescence commonly appearing whorled and often more than 2 mm. wide. . . . .  
. . . . . 3. *L. minor* L.
4. External sepals about equaling the inner sepals and never equalling the capsule in length; capsule usually exceeding the inner sepals by about 1/3-1/2 its length; cauline leaves narrowly oblong to linear, usually 6 times (or more) as long as wide, those below the inflorescent alternate and less than 2 mm. wide. . . . .  
. . . . . 4. *L. sessiliflora* Raf. (*L. patula* Legg.).
3. External sepals shorter than the internal sepals. . 5.
5. Leaves pubescent on both upper and lower sur-



faces (at least those of the basal shoots conspicuously pilose above and below while the cauline and rameal leaves are usually inconspicuously pubescent over entire surface); flowers or fruits mostly clustered in 2's or 3's; capsule wall thickened and indurate. . . . . 5. *L. cernua* Small.

5. Leaves variously pubescent below but glabrous on upper surface; flowers or fruits not appearing fascicled (but obviously attached separately); capsule wall thin or at least not conspicuously indurate. . . . . 6.

6. Aerial stems perennial, suffruticose, clearly woody at base, with wiry woody branches; capsule exerted from the often spreading calyx by  $1/3-1/2$  its length; calyx sparingly short-pubescent to glabrous. . . . .  
. . . . . 6. *L. deckertii* Small.

6. Aerial stems annual, herbaceous, dying to the base each year; capsule equaling the calyx or exerted not more than  $1/5$  its length from the closely enveloping sepals; calyx moderately to densely pilose. . . . . 7.

7. Leaves abruptly tapering at apex into a hardened, shiny, conical callosity about 0.25 mm. long; inner sepal clearly 3-nerved (often best demonstrated by moistening); pedicels averaging over 1.5 mm. long; capsule exceeding the sepals by about  $1/5$  its length; seeds mostly 2. . . . . 7. *L. pulchella* Raf. (= *L. leggettii* Britt. & Holl.).

7. Leaves pointed but not differentiated into a callosity; inner sepal 1-nerved; pedicels averaging less than 1.5 mm. long; capsule almost completely enveloped by the sepals; seeds mostly 3-6. . . . . 8.

8. Calyces densely appressed pilose; stems and under surface of the leaves



or at least the midvein and often the margins appressed pilose; capsules equaling or slightly shorter than the closely enveloping inner sepals. . . . .

. . . . . 8. *L. torreyi* Legg. ex Britt.

8. Calyces glabrous; stems and leaves completely glabrous; capsules very slightly exceeding the inner sepals at maturity . . . . . 9. *L. lakelae*.

***Lechea lakelae* Wilbur, sp. nov.**

Caudex simplex vel paucis aliquotve ramis; folia ramealia peranguste linearia-elliptica, acuta, 0.6-1.2 cm. longa et 0.3-1.0 mm. lata, subtus costa et margine glabra; pedicelli glabri, (0.8) 1.0 (1.2) mm. longi; calyx fructifer obovoideus, 1.5-1.9 mm. longus et 1.2-1.6 mm. latus; sepala interiora glabra et leviter carinata, 1.5-1.9 mm. longa et 1.2-1.6 mm. lata; sepala exteriora glabra linearia vel anguste lanceolata  $1/2$  vel  $2/3$  plo breviora quam sepala interiora; capsula c. 1.2-1.6 mm. longa; semina 3, c. 0.8 mm. longa.

Caudex simple or with few to several branches; basal resting shoots unknown; aerial (*i.e.* flowering and fruiting) stems 1 to several, 2-3 (4) dm. tall, branching mostly above the middle and forming a rather compact, wiry-stemmed, bushy top with completely glabrous axes; cauline leaves lacking on all specimens seen; rameal leaves very narrowly linear-elliptic, tapering to both the apex and base, 0.6-1.2 cm. long and 0.3-1 mm. wide, completely glabrous above and below with the midvein somewhat elevated beneath; fruiting branches and pedicels glabrous, the pedicels (0.8) 1.0 (1.2) mm. long; fruiting calyx obovoid, broadest above the middle and tapering into the broadly obpyramidal, coriaceous base, drying dark reddish brown, completely glabrous; inner sepals about 1.5-1.9 mm. long, including the indurate, obpyramidal base, and 1.2-1.6 mm. broad, slightly exceeded by the mature capsule, very broadly elliptic to almost orbicular, apically broadly rounded, only the strongly elevated



or slightly keeled midvein clearly visible; outer sepals linear to narrowly lanceolate, about  $1/2$ - $2/3$  as long as the inner; capsules broadly barrel-shaped, cylindrical, about 1.2-1.6 mm. long and 1-1.2 mm. in diameter, the valves firm, indurate, tardily dehiscing about  $1/2$ - $2/3$  the distance from apex to base; seeds 3, equilateral, dorsiventrally compressed, about 0.8 mm. long and 0.4 mm. wide, blackish.

TYPE: Collier Co., Florida: Marco Island, moist level grassy area, higher beach of recently made lake. 7 August 1967. *Lakela* 30953 (Holotype, DUKE; Isotype, USF).

OTHER SPECIMENS EXAMINED: Collier Co.: coastal strand, *Serenoa-Ceratiola* scrub, growing with *Cyperus* in white sand, *Lakela* 31879 (DUKE); Marco Island, coastal strand—*Pinus elliottii* association, *Lakela* & *Almeda* 31567 (DUKE); Marco Island with *Indigofera*, *Polygonella*, in *Ceratiola-Quercus* scrub, on U.S. 92, *Lakela* 27852A (USF); lagoon head, upper beach, *Lakela* 31673 (DUKE).

My recollection and rather brief notes made more than a dozen years ago indicate that the species also occurs or occurred on Florida's eastern coast in Broward Co.: sandy scrub above Fort Lauderdale, *Buswell* 24 July 1936 (BUS!).

The apparent nearest relative of the new species, *Lechea lakelae*, is *L. torreyi*. The most obviously distinctive features are indicated in the key, but the two taxa may be readily distinguished at a glance. Obviously I feel that both merit recognition at specific rank. In the mind of some there still may remain a nagging suspicion that the strikingly distinctive plants of the newly described taxon are merely a glabrous form of *L. torreyi*. I feel, however, that the apparently consistently longer capsules when compared to the length of the inner sepals suggest that *L. lakelae* is more than that.

This species is named in recognition of Dr. Olga Lakela upon whose keen eye and careful collections our present knowledge of this taxon is largely based. It is humbling to recall that her recent significant contributions to southeastern botany were made in her "retirement" years after an active career as a teacher and researcher in Minnesota.



Not many botanists are destined to write floras of as distant regions as one of Minnesota's northeastern counties and Florida's southern tip.

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PIMPINELLA SAXIFRAGA L. (UMBELLIFERAE) IN WISCONSIN: This species, adventive from Eurasia, has heretofore been reported to extend from Newfoundland and New Brunswick to Delaware and the District of Columbia, west to Pennsylvania, Ohio, and Indiana (Mathias & Constance, 1944. Umbelliferae, *in* North American Flora 28B (1): p. 133; Fernald, Gray's Manual, 1950; Gleason, Illustrated Flora, 1952; Gleason & Cronquist, Manual of Vascular Plants, 1963). Jones (Flora of Illinois, 1950) and Steyermark (Flora of Missouri, 1963) do not mention the plant, so it appears not to have spread westward. I report here its discovery in Wisconsin: WINNEBAGO CO.: roadside at junc. Country Club Road and Black Wolf Point Road, sect. 24, T17N, R16E, 24 September 1967, *Below* 146; in roadside ditch ca. 1/8 mile from the junc. of county trunks YY and N, on N, sect. 20, T17N, R16E, 26 September 1972, *Rhyner* 044.

The two specimens are deposited in the herbarium here at Oshkosh. The curators of the herbaria at MIL, UWM, and WIS have no records of the plant from Wisconsin; Iltis at WIS has kindly confirmed the identifications. The plant's occurrence at two sites four miles apart and spanning a five-year period warrants its inclusion as an element in the Wisconsin flora.

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