NEW COMBINATIONS IN THE SOLANEAE (SOLANACEAE)
AND COMMENTS REGARDING THE TAXONOMIC
STATUS OF LEUCOPHYSALIS

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ABSTRACT

New combinations are made for four species previously included in Chamaesaracha.

During the course of a revisionary study of Chamaesaracha, several species were encountered that are better treated in other genera. With the removal of these species, Chamaesaracha becomes a natural, closely knit genus of seven species restricted to the desert regions of the southwestern United States and adjacent northern Mexico. New combinations for these species are as follows:

**Saracha potosina** (Rob. & Greenm.) Averett, **comb. nov.**


[MEXICO. SAN LUIS POTOSI: Tamasopo Canyon, Nov. 1880, Pringle 3654 (VT, holotype).]

The fruiting calyx of this species is rotate and expanding under the berry like that of other species of *Saracha* and unlike those of *Chamaesaracha*.

**Physalis sinensis** (Hemsl.) Averett, **comb. nov.**


[CHINA. Hupeh, Henry 2902 (K, holotype, not seen; NY, isotype).]

This species has an inflated, ribbed fruiting calyx which encloses the berry and therefore belongs with *Physalis*.

**Leucophysalis heterophylla** (Hemsl.) Averett, **comb. nov.**


[CHINA. Hupeh, Henry 6207 (K, holotype, not seen; GH, NY, isotypes).]

This species is transferred to *Leucophysalis* on the basis of its floral and fruiting characters.

**Leucophysalis nana** (Gray) Averett, **comb. nov.**


This species is transferred to *Leucophysalis* on the basis of its floral and fruiting characters.

Although the fruiting calyx of this species does not always exceed the berry in length, it is transferred to *Leucophysalis*. Like *L. grandiflora* the berry is fleshy

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and the placenta extends the entire length of the berry with seeds attached all along the placenta. In *Chamaesaracha* the berry is dry, and the placenta is mostly basal. The species of *Chamaesaracha* are extremely uniform in the placental character, and the differences exhibited by *L. grandiflora* are significant. In addition, flavonoid data (Averett & Mabry, 1970) suggest an affinity between *L. grandiflora* and *L. nana*. The flavonoid profiles of the two species are identical except for the absence of one compound from the complement in *L. nana*.

Some comment on *Leucophysalis* is in order since its taxonomic status may be somewhat confused. *Leucophysalis* was established as a monotypic genus by Rydberg (1896) to accommodate *L. grandiflora*, formerly included in *Physalis* by Hooker (1840), Fernald (1949: 82–83) compared *L. grandiflora* with certain Asian species of what he considered to be *Chamaesaracha*, and as a consequence transferred it to the latter genus. However, unbeknownst to Fernald, Makino (1914: 20–22) had removed the Japanese species from *Chamaesaracha* placing them in his newly established genus *Physaliastrum*. If the relationship Fernald suggested exists, and indeed, it may, the species in question still do not belong with *Chamaesaracha*. Rather, they should all be treated as *Leucophysalis*. Investigations are currently underway to bring additional evidence to bear on the question.

**Literature cited**


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