

PLANT TAXONOMY

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ABSTRACTS

The Relationship of Ecuadorian *Quinoa de Castilla* and *Amaranthus caudatus* L. M. PATRICIA COONS, Botany Department, Indiana University, Bloomington, Indiana 47401.—The common name *quinoa de Castilla* has been applied to both a dark-seeded amaranth from Ecuador and a pale-seeded amaranth from Argentina. The Argentinian plant, cultivated for its edible seeds, has been included within the Andean grain species, *Amaranthus caudatus* L., by J. D. Sauer. The Ecuadorian plant, which is used medicinally by Indians, also resembles this species closely. However, the two are not identical. The most conspicuous differences are in seed color, and there are some differences in female flower characters. Hybrids between Ecuadorian *quinoa de Castilla* and *A. caudatus* have been obtained. This study included a report on such hybrids, a morphological comparison of *A. caudatus* with Ecuadorian *quinoa de Castilla*, and a discussion of their relationships.

NOTES

Indiana Plant Distribution Records, XXI. 1969-70. JACK HUMBLEs, Botany Department, Indiana University, Bloomington, Indiana 47401.—Genera are listed in the order of their appearance in Deam's *Flora of Indiana* (1); species within each genus are in alphabetical order, and they are followed by the name of the county in which they were collected. Nomenclature is in accord with that used in Gray's Manual of Botany, 8th ed., 1950(2), unless noted.

The specimens were collected by the following persons: Greg Anderson, Pat Coons, Lloyd and Adele Beesley, Raymond Fleetwood, Jack Humbles, Gerald Gastony, C. Eugene Jones, Dick Neuwirth, Kathie Peterson, Helene Starcs, Floyd Swink, Jim Whitis, and Marjorie Wiggans. Voucher specimens for all the new records are in the herbarium of Indiana University.

The records include six plants new to the state: a fern hybrid collected by Dr. Gerald Gastony, *Asplenium pinnatifidum* x *trichomanes*; *Cystopteris tennesseensis* and *Dryopteris celsa* collected by Deam and recently redetermined by Dr. W. H. Wagner; *Najas minor* collected by Mrs. Helene Starcs; and *Epilobium hirsutum* and *Eragrostis trichodes* collected by Dr. Floyd Swink.

Taxonomic Entities

Osmunda regalis var. *spectabilis*, Martin. *Cystopteris bulbifera*, Martin. *Cystopteris tennesseensis*, Gibson, Jefferson, Knox, Monroe

Owen (Gleason and Cronquist, Manual of Vascular Plants (3)). *Dryopteris celsa*, La Porte. *Asplenium pinnatifidum* x *trichomanes*, Martin. *Lycopodium complanatum* var. *flabelliforme*, Jackson.

Najas flexilis, Fulton. *N. gracillima*, Jackson. *N. guadalupensis*, Harrison, Jackson, Kosciusko. *N. minor*, Jackson. *Sagittaria latifolia*, Monroe. *Vallisneria americana*, Monroe. *Eragrostis trichodes*, Starke. *Chloris verticillata*, St. Joseph. *Scirpus lineatus*, Monroe. *Allium vineale*, Martin. *Triphora trianthophora*, Monroe. *Coralorrhiza odontorhiza*, Franklin.

Humulus japonicus, Monroe. *Asarum canadense*, Martin. *Rumex altissimus*, Lawrence. *R. crispus*, Martin. *Amaranthus hybridus*, Brown. *A. spinosus*, Brown. *Froelichia gracilis*, Newton. *Holosteum unbellatum*, Greene, Morgan, Parke, Pulaski. *Silene antirrhina*, Washington. *Dianthus armeria*, Martin. *Anemone canadensis*, Madison. *A. quinquefolia* var. *interior*, Pulaski. *Clematis pitcheri*, Greene.

Lepidium campestre, Orange. *L. virginicum*, Orange. *Thlaspi arvense*, Pulaski. *Arabidopsis thaliana*, Pulaski. *Descurainia pinnata*, Greene. *Brassica hirta*, La Porte. *Sisymbrium altissimum*, Jackson. *Hesperis matronalis*, Monroe. *Fragaria virginiana* var. *illinoensis*, Martin. *Medicago lupulina*, Martin. *Coronilla varia*, Bartholomew, Brown, Martin. *Euphorbia dentata*, Rush. *E. obtusata*, Greene.

Viola kitaibeliana, Greene. *V. papilionacea*, Cass. *Ammannia coccinea*, Monroe. *Epilobium hirsutum*, La Porte. *Oenothera laciniata*, Monroe. *Asclepias hirtella*, Monroe. *Myosotis scorpioides*, Owen. *Lithospermum arvense*, Greene. *L. canescens*, Pulaski. *Verbena simplex*, Martin. *Lamium purpureum*, Brown, Cass. *Linaria vulgaris*, Rush. *Lindernia dubia* var. *riparia*, Brown. *Houstonia caerulea*, Greene. *Lonicera japonica*, Harrison. *Carduus nutans*, Marion, Morgan. *Cirsium arvense*, Bartholomew.

Literature Cited

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2. FERNALD, M. L. 1950. Gray's manual of botany. American Book Co., New York. 1632 p.
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The History and Current Status of *Solanum caripense*. GREGORY J. ANDERSON, Department of Botany, Indiana University, Bloomington, Indiana 47401.—*Solanum caripense* H. & B. ex Dun. is a geographically and morphologically wide ranging species of the non-tuberous subsection *Basarthrum* of the genus *Solanum*. It is primarily because of its great morphological and distributional variance that the species is of interest.

Solanum caripense was the first unknown species of *Solanum* to be collected by Humboldt and Bonpland on their expedition to the

New World. Their collection was described initially by Dunal (5) in 1816, and two years later in more detail by Kunth (8). In 1852, Dunal (6) enlarged upon his description. There is little difference between Dunal's and Kunth's descriptions except for an interpretation of the leaf. Examination of the type specimen clarifies the discrepancy: most leaves are simple, but there is at least one which is obscurely ternate. Interest in this species was revived in 1962 by D. S. Correll's monograph of the section *Tuberarium* of *Solanum* (4). After collecting material at the type locality, H. Brücher (1) questioned Correll's interpretation. He redescribed the species and refuted previous interpretations (2, 3). The present author's studies, along with evidence presented by Heiser (7), support Correll's treatment.

Literature Cited

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