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On the Presence of Three Vascular Plants, *Melothria pendula*, *Carex extensa*, and *Aneilema keisack*, in Maryland

ABSTRACT: Distributional data on three species of vascular plants, *Melothria pendula*, *Carex extensa*, and *Aneilema keisack*, are presented for tidewater Maryland. *M. pendula* is added to Maryland's flora. *C. extensa*, although previously collected, is reported upon for the first time in Maryland. *A. keisack* was collected on Maryland's Eastern Shore for the first time.

Numerous strand and wetland vascular plant distributional data were collected by the authors during 1971 and 1972. This work was collateral to participation in Maryland's wetland mapping program and other management functions. Observations were made throughout the 16 tidewater counties and the City of Baltimore. Data for more than 100 species from over 200 sites were collected. Three of these species, *Melothria pendula* L., *Carex extensa* Good., and *Aneilema keisack* Hassk., have not been reported previously from Maryland. Consequently a number of herbarium examinations were conducted. Based upon these examinations and our observations and collections, it became apparent that all three species have been overlooked in Maryland.

M. pendula is an addition to the State flora; *A. keisack* and *C. extensa* have been collected only a few times in the past, although they have not been reported in the published literature. A more detailed elaboration of the status of all three species is given below. Present collection localities are shown on Fig. 1; voucher specimens will be deposited in herbaria at the Academy of Natural Sciences of Philadelphia (PH) and the University of Maryland (MARY).

In 1971 and 1972 *M. pendula* was found by the authors in the understory of a loblolly pine stand along the Chesapeake Bay about one-half a mile north of Flag Ponds in Calvert County, Maryland. It was also collected by Dr. Russel G. Brown at College Park, Maryland in the summer of 1973.

Although Fernald (1950) acknowledged that *M. pendula* formerly occurred as far north as Pennsylvania, we found no voucher specimens collected from Pennsylvania, Delaware or Maryland. Likewise, Mercer (1971) did not report it from Calvert County, Maryland, the county in which we recently collected it. However, two herbaria had collections from Virginia, the northern-most state in which this species is currently thought to occur. Thus, our collection

represents either an extension of the range of *M. pendula* to Maryland or possibly its re-discovery.

C. extensa was found by the authors at two brackish marsh sites (Rock Creek and Dames Quarter Creek) in Somerset County, Maryland, on June 28, 1972, and at one site (Windsor Creek) in Wicomico County, Maryland, on August 11, 1972. Fernald (1950) maintained that this sedge was found only locally in coastal areas of New York and Virginia. Our herbaria searches, however, uncovered collections from southern Dorchester County, Maryland, by Neil Hotchkiss in 1961 and from Somerset County southwest of Dames Quarter by Francis Uhler in 1948. Both of these collections were also from brackish marshes where this species could be presently well-established in Maryland.

A. keisack was found in Wicomico County, Maryland, about three miles south of Salisbury along the Wicomico River on September 7, 1971. To the best of our knowledge, this represents the first tidewater collection of this species on Maryland's Eastern Shore and possibly for the entire State. It was growing above the intertidal zone on the edge of a fresh water tidal marsh. On October 11, 1971, it was also found on Mattawoman Creek in Charles County, Maryland, along the bank of a tidal creek in a wooded swamp and in a fresh tidal marsh. Fernald (1950) stated that this species occurred only in southeastern Virginia and East Asia.

Although our collections document the existence of *A. keisack* in Maryland, its presence on Mattawoman Creek was established at least by September of 1970, when beds were examined by Francis Uhler and Neil Hotchkiss of the Patuxent Wildlife Research Center. In addition, two herbarium specimens were collected in 1949 and 1950 at a non-tidal site on the Patuxent Wildlife Research Center in Maryland.

More study of vascular plant distribution in tidewater Maryland should further clarify the status of these and other wetland species. Higman (1972) mentioned a need for such study after comparison of two major checklists of Chesapeake Bay plants (Krause et al. 1971; Wass 1972) with an intensive local survey in Anne Arundel County, Maryland (Higman 1968). The local survey yielded a few species additional to both of the broader ones. In recognition of this need for better distribution data, the authors will continue their collections.