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AN UNDESCRIBED SPECIES OF _THELYPODOIPSIS_ (BRASSICACEAE) FROM THE UINTA BASIN, UTAH

Stanley L. Welsh\(^1\) and N. Duane Atwood\(^2\)

**Abstract.**—_Thelypodiopsis argillacea_ Welsh and Atwood sp. nov. is described from specimens collected on the Green River Shale Formation in Uintah County, Utah.

The impact of the Endangered Species Act of 1973 is being felt throughout the federal agencies that manage Utah lands. Intensified field investigations have yielded not only known taxa that are rare and potentially threatened or endangered, but also those that have not been previously named or described (i.e., those new to science). One of those new species is the one described below. The search that yielded the type material was undertaken to rediscover, if possible, living plants of the rare and obscure monotypic and endemic genus _Glaucocarpum_.

Although _Glaucocarpum_ was not discovered until later in the summer of 1976, several other plants of interest were collected from the type locality of _Glaucocarpum_. Included among the collections were specimens of a crucifer, which is distinctive among the numerous Utah species. The presence of two narrowly endemic species, _Glaucocarpum suffrutescens_ (Rollins) Rollins and _Thelypodiopsis argillacea_ Welsh and Atwood, in the same general area is not altogether surprising when one considers the role that the common substrate (Green River Shale) has played as a spawning ground for narrow endemics. The obscure _Astragalus lutosus_ Jones, for example, is also known from that formation, as are a number of other species.

In appearance and duration, _T. argillacea_ is unlike any of the species of _Thelypodiopsis_ in Utah. Those previously known from the state are all biennials, with well-developed basal leaves; the stems of _T. argillacea_ arise from a branching subligneous caudex. The lowermost leaves are reduced in size; the others are merely sessile and not sagittate or auriculate as in the biennial species. In the diagnosis, _T. argillacea_ is compared to _T. linearifolia_, a perennial species known from Colorado and Arizona to Mexico. _T. argillacea_ differs from _T. linearifolia_ in the salient features noted in the diagnosis inter alia.

The type material lacks mature siliques of the current season, and measurements of pods are taken from shattered fragments persisting on stems of the previous year.

_Thelypodiopsis argillacea_ Welsh and Atwood, sp. nov.

_Thelypodiopsis linearifolia_ (Gray) Al-Shebaz aemulans, differt plantis parvioris (13-30, nec 50-150 cm), foliis brevioris, petalis parvioris unguibus laminis nec distinguendis et siliquis et stylis brevioris et lobis stigmatibus obtusis.

Plantae perennes omnino glabrae glauceae; caules 13-30 cm altus simplices vel ramificantes enascentes caudex sublignei; folia 9-35 mm longa 0.8-2 mm lata sessilia omnino caulina nec auriculata linearia leviter carnosa acuta vel rotundata; racemii (5) 8-22floribus; pedicelli 7-18 mm longi adscendentes; sepala 4.2-6.5 mm longa violacea marginibus hyalinis; petala 7.8-10.9 mm longa 2.5-3.2 mm lata alba vel lilacina, venis purpuris conspicuis, ungue lamina nec

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distinguenda; antherae 1.7-2.5 mm longae; siliquae 18-25 mm longae 1-1.2 mm latae subsessiles teretes adscendentes vel erectae; styli 0.5-1 mm longi obconici; stigmata bilobata.

Holotype: Utah, Uintah County, hills west of Willow Creek, on the east slope of Big Pack Mountain, T10S, R20E, Sec. 33, at 5000 feet elevation, on Green River Shale, N. D. Atwood 6627, 11 May 1976 (BRY, isotypes to be distributed).

Fig. 1. Thelypodiopsis argillacea Welsh and Atwood sp. nov.: A. Habit sketch (x 1); B. Flower (x 10); C. Flower (dissected) (x 10).