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CRATAEGUS CHRYSOCARPA ASHE VAR. *PHOENICEA* (SER. *ROTUNDIFOLIAE*; ROSACEAE)

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ABSTRACT

E.J. Palmer's widely used varietal name *Crataegus chrysocarpa* var. *phoenicea* was not typified in its original description of 1937 and is validated here as **Crataegus chrysocarpa** var. **phoenicea** E.J. Palmer ex J.B. Phipps, var. nov.

KEY WORDS: *Crataegus chrysocarpa* var. *phoenicea*, *Crataegus aboriginum*, *Crataegus dodgei*, *Crataegus flavida*, Rosaceae

Crataegus chrysocarpa Ashe var. *phoenicea* was described by E.J. Palmer in Dole's Flora of Vermont (1937) but unfortunately rather briefly and without designation of a type. This has led to a very wide interpretation of this taxon so as to include a variety of *Crataegus chrysocarpa*-like plants with glabrous inflorescences. Collectively these plants are widely found from the Great Lakes region to the St. Lawrence Valley and New England and are mostly seemingly intermediate between var. *chrysocarpa* and *Crataegus dodgei* Ashe. As other taxa may be involved, the distribution statement given below for var. *phoenicea* is uncertain.

This paper typifies *Crataegus chrysocarpa* var. *phoenicea* from Palmer's original material and provides a more complete description. Type specimens are selected so as to maintain the intent of Palmer's usage.

Crataegus chrysocarpa Ashe var. **phoenicea** E.J. Palmer ex J.B. Phipps, var. nov. Figs. 1, 2, and 3.
TYPE: **USA**. **Vermont**. Addison Co.: Ferrisburg, 22 Aug 1941, *R.C. Bean C6* (holotype [designated here] A!; isotype: A!). The type is a good fruiting specimen from Vermont, annotated by Palmer and having glabrous infructescence branches. Because indumentum is quite often not persistent, however, this fruiting season glabrousness is not definitively predictive of early season glabrousness. **EPITYPE** (designated here): **USA**. **Rhode Island**. Kent Co.: Bristol, 28 May 1939, *E.J. Palmer 44757* (A!). Inadequacy of the fruiting holotype requires the selection of an epitype and unavailability of a suitable flowering specimen from the geographic area of the holotype leads to the selection of an epitype from Rhode Island. The specimen chosen is an excellent flowering specimen annotated by Palmer and having all the diagnostic characteristics of the variety.

Bushes, 2–3 m. **Leaves**: petioles glabrous, with a few small glands or eglandular; blades 2.5–4 cm long, ovate to rhombovate, bases broad-cuneate, lobes acute, max. indentations 15–20%, veins 3–5 per side, glabrous. **Inflorescences**: 5–10-flowered; branches glabrous; lower bracteoles with sessile glands. **Flowers**: 15–20 mm diam.; hypanthia externally glabrous; sepals glandular-denticulate/serrate; stamens 10, anthers cream or ivory. **Pomes**: red, subglobose, 8–10 mm diam., glabrous.

Flowering May–Jun; fruiting Sep–Oct. Open brushy places; 50--350 m. Ont., Que.; R.I., Vt.; local. Reports from Conn., Mass., Me., N.Y., and Wis. should be re-examined.

Figure 1. Herbarium specimen of *Crataegus chrysocarpa* var. *phoenicea* in fruit cropped to enhance detail (isotype, from Vermont).

Figure 2. Herbarium specimen of *Crataegus chrysocarpa* var. *phoenicea* in flower cropped to enhance detail (epitype, from Rhode Island).

Figure 3. (a) inflorescence from part of epitype showing glabrous pedicels and a residual larger type bracteole with all glands sessile. (b) Infructescence from part of isotype showing glabrous pedicels and fruit.

Crataegus chrysocarpa var. *phoenicea*, as here elucidated, is similar to typical forms of var. *chrysocarpa* in stature, leaf shape (Figs.1, 2; +/- ovate or rhombovate with angular lobes), and fruit color (red) but differs by being completely glabrous (Figs. 3a, 3b) and having somewhat less deeply serrate sepals (Fig. 3a). Its larger lower bracteoles are somewhat narrow-elliptic (Fig. 3a) in the manner of the *C. flavida* Sargent of the *C. dodgei* group (also ser. *Rotundifoliae*). However, unlike *C. flavida*, these bracteoles are not stipitate-glandular in the few flowering specimens seen. *Crataegus flavida* further differs in its yellow to ruddy fruit color and smaller, differently-shaped leaves, usually broadest in the middle or somewhat beyond. The very rare *Crataegus aboriginum* Sargent from near Montreal is another similar form, differing in its larger leaves (5—6 cm) and in having the larger bracteoles stipitate-glandular and the sepals deeply glandular-serrate. These features were also noted by Kruschke (1965).

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