

**ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM**

**Plant Abstract**

**Element Code:** PDLAM03090

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Agastache pallida* (Lindl.) Cory  
**COMMON NAME:** Pale giant hyssop, Pale Giant-hyssop, Barber Giant Hyssop  
**SYNONYMS:** *Agastache barberi*; *Brittonastrum barberi*  
**FAMILY:** Lamiaceae

**AUTHOR, PLACE OF PUBLICATION:** Cory, 1936, *Rhodora* 38(455): 407. (Lindley. 1846. Edward's Bot. Reg. 32: pl. 29.)

**TYPE LOCALITY:** Probably from mountains or foothills N or W of Ciudad Chihuahua, Mexico.

**TYPE SPECIMEN:**

**TAXONOMIC UNIQUENESS:** The species *pallida* is 1 of 16 in the genus *Agastache*, and genus *Agastache* is 1 of 76 genera in the family Lamiaceae. *Agastache pallida* is considered to be comprised of two varieties (Martin et al. 1998 and Sanders 1987, *in* NatureServe 2008), var. *coriacea* and var. *pallida*. Variety *pallida* (synonym *A. barberi*) occurs only in the U.S. (NatureServe 2008).

**DESCRIPTION:** Perennial herb with a somewhat woody caudex, 40-130 cm (16-51 in) tall. The stems are erect or ascendingly branched, 1-3 mm in diameter at the midpoint. Leaves are broadly triangular and opposite, (1.5)2-6 cm (0.8-2.4 in) long, the blades 1-1.8 times longer than wide. Leaf color is dark or bright green above, paler or purplish below; the base is cordate to truncate and the margins toothed; apex obtuse to acute. The inflorescence is continuous to interrupted, usually with 8-15 verticals; the cymes are mostly panicle-like, 5-20; bracteoles averaging less than 2 mm long. **Flowers:** The calyx is usually deep rosy-lavender, 8-12 mm long; the upper calyx teeth averaging 1.2-2.0 times longer than wide. The tube of the calyx is 6-10 mm long, not appearing plicate, and the secondary costae are thinner than the primary costae; tooth tips are cucullate. The corolla tube (united petals) is (12-)15-30(-35) mm long, and rose-pink to flesh colored (also reported lavender-purple). Stamens and style are a little longer than the petals (exserted); the filaments are often bristly; and anthers are 0.8-1.2 mm long. Seeds (nutlets) are 1.5-2.2 mm long and 0.8-1.2 mm wide, ovoid-ellipsoid, with apical hairs. (Damrel, D.Z., and R. Puente-Martinez, *in* Christy et al. 2003).

**AIDS TO IDENTIFICATION:** Flowers are showy for the genus, lavender-purple in color.

**ILLUSTRATIONS:**

Color photo of synonym (BOTRESEARCH USA 1998-2008  
[http://botresearch.50megs.com/Agastache\\_barberi.html](http://botresearch.50megs.com/Agastache_barberi.html))

**TOTAL RANGE:** Southern Arizona, south into the Sierra Madre Occidental in Sonora and Chihuahua, south to Durango, Mexico.

**RANGE WITHIN ARIZONA:** Patagonia Mountains, Santa Cruz County.

**SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** Herbaceous perennial.

**PHENOLOGY:** Flowers from August – October. In Sonora and Chihuahua, Mexico, it flowers from July to November (Martin et al. 1998).

**BIOLOGY:** Due to this plants attractiveness both to butterflies and hummingbirds, it has been collected and developed in cultivation. The growing requirements are a fertile well-drained soil in full sun or partial shade. Under these conditions the species can be expected to attain a height of 24 in (61 cm) and a width of 12 in (30 cm). Under the USDA hardiness Zones it is rated from 6-10. (BOTRESEARCH USA 1998-2008).

**HABITAT:** Pine-oak woodlands, along stream banks in canyon bottoms in the shade of oaks (Damrel, D.Z., and R. Puente-Martinez, *in* Christy et al. 2003; SEINet, accessed 2008). In Sonora and Chihuahua, Mexico, they are found streamside among boulders, and volcanic ash (Martin et al. 1998).

**ELEVATION:** At about 4,918 ft (1500 m) in the Patagonia Mountains (NatureServe 2008), and 5,902-8,525 ft (1800-2600 m) in Mexico. Damrel, D.Z., and R. Puente-Martinez (*in* Christy et al. 2003) report the elevation in the Patagonia Mountains for var. *pallida* between 1700-1750 m (5600-5700 ft). Reported from 1800-2500 m in Sonora and Chihuahua, Mexico (Martin et al. 1998).

Based on collection records from SEINet (accessed 2008), elevation ranged from 2621 m (8593 ft) in Graham County, and generally collected between 1706-2000 m (5593-6557 ft) in the Patagonia Mountains of Santa Cruz County, but also collected at 1524 m (4997 ft).

**EXPOSURE:** Collected from south facing hillside (SEINet, accessed 2008).

**SUBSTRATE:** Humus soils.

**PLANT COMMUNITY:** Ponderosa pine stand, in mixed pine-oak woodland (Thunder Mine); also oak woodland. Associated plants include: *Cologania obovate* (Lemmon's cologania), *Juniperus deppeana* (alligator juniper), *Quercus arizonica* (Arizona white oak),

*Q. hypoleucoides* (silverleaf oak), *Rhus trilobata* (skunkbush sumac); (*M. emersleyi* [bullgrass], *Pinus* [pine], *Quercus* [oak] – Graham Cty). (SEINet, accessed 2008).

**POPULATION TRENDS:** Unknown

## **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None  
**STATE STATUS:** None  
**OTHER STATUS:** None

**MANAGEMENT FACTORS:**

**PROTECTIVE MEASURES:**

**SUGGESTED PROJECTS:** Surveys are needed to determine distribution and abundance of naturally occurring populations.

**LAND MANAGEMENT/OWNERSHIP:** USFS Coronado National Forest.

## **SOURCES OF FURTHER INFORMATION**

### **LITERATURE CITATIONS:**

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#### MAJOR KNOWLEDGEABLE INDIVIDUALS:

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T.R. Van Devender - Arizona-Sonora Desert Museum, Tucson, Arizona.

#### ADDITIONAL INFORMATION:

L.J. Toolin and T.R. Van Devender collection in Thunder Mine area, fall 1979, replicates old Kearney and Peebles #10122 and Peebles and Harrison #4748, Patagonia Mountains collections.

Aromatic colorful plant that attracts butterflies and hummingbirds. Has been collected in the past and now in cultivation and sold in nurseries for use in landscape borders, and pots in USDA Zones 6-10. Requires fertile well-drained soils. This plant can hybridize with others such as *A. mexicana*. (BOTRESEARCH USA 1998-2008).

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1991-10-18 (BKP)  
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2008-07-17 (SMS)

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