

Manzanitas known for twisting branches, hard wood, smooth red bark; also for urn-shaped flwrs. and apple-like frs. Big-Berry & Mexican Manzanita SD Co.'s 2 largest spp.; habit often like small trees. Neither sp. has burl (nor *A. otayensis* nor *A. pringlei* below). Plants lacking burl often grow taller than those having burl, but weaker roots render pls. vulnerable to tipping. Dying in fires, new pls. germinate from surrounding seeds.

BIG-BERRY MANZANITA

Arctostaphylos glauca

NATIVE SHRUB

photos: CNF Japatul Valley

CFMTD

common in chaparral, mainly foothills, <4500'; also cen.CA so. to no.BC. occasionally seen in high desert. pl. erect/arborescent, <15' ht., or spreading. no burl. woody; branches long. bark red-brown. lvs. distinctive - wide, rounded, grey, glaucous. flwrs. white or pink. infl. bracts long, triangular. berries big, to 1"; seed a large stone.



OTAY MANZANITA

Arctostaphylos otayensis

NATIVE SHRUB

photos: San Miguel Mtn.

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CFMTD

local endemic in so.SD Co. mtns., 1000-4000'; to no.BC. no burl. traits appear to cross *A. glauca*, *A. pungens* (all n=13); A.o. pls. generally smaller. lvs. elliptic. flwrs. white. frs. small, mealy.



Notable morphologic traits of *Arctostaphylos* spp. include leaf shape and color, bracts on infl., fruit size, seed size, and quantity of seeds/fr. *A. glauca* has wide, rounded gray lvs.; *A. pungens* narrow, pointed, green lvs. (called Point-leaf Manzanita in NM, TX). *A. pringlei* lvs., frs. resemble *A. glauca* but pl. has hairs/bristles and distinctly pink bracts. *A. otayensis*, *A. pungens* both have smaller frs. Chromosomes also counted for speciation.

MEXICAN MANZANITA

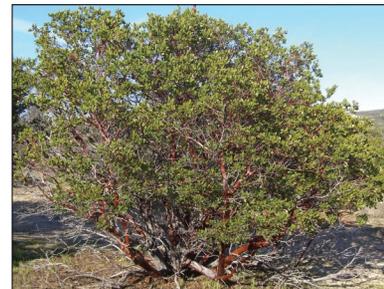
Arctostaphylos pungens

NATIVE SHRUB

photos: Wynola (top L); McCain Valley (bot.L); Pine Valley (R)

CFMTD

common in mtns., >2500'; occasional elsewhere. also sw.US - so.CA to CO, TX, Mex. thrives above snow-line, also more arid des.trans. pl. erect, multi-trunked, <12' ht. no burl. woody; densely branched. bark deep red. lvs. narrow, green, pointed. flwrs. white/pink in umbel-like infl. bracts short. berries smaller, mealy. nutlets >2/fr.



PINK-BRACT MANZANITA

Arctostaphylos pringlei ssp. *drupacea*

NATIVE SHRUB

photos: CNF King Creek

CFMTD

uncommon in mtns., >3000'. also so.CA interior. pl. erect, <10' ht. twigs, lvs. hairy or bristly and glandular-sticky. lf. shape +/- like *A. glauca*. infl. notable for hairy pink bracts (photo R-R).

