

Agave americana L. var. *americana*, COMMON CENTURY PLANT. Perennial herb, leaf-succulent, evergreen, clonal, spinescent, rhizomatous, fibrous-rooted, hemispheric-rosetted with spine-tipped leaves, each clone with many rosettes of plantlets of different sizes and ages, occasionally producing 1 ± erect flowering stalk in range 600–800+ cm tall; shoots bluish green, in range with a mature basal rosette 100–150 × 130–200 cm, leaves armed with strong, spinelike teeth on margins, when severely water-stressed basal leaves sometimes reflexed above midblade, rosette flowering after numerous years of vegetative growth and then shoot dying after fruits dehisce, glabrous, glaucous; rhizomes between mother plant and satellite plantlets (ramets) horizontal, to 100 mm deep, to 15 mm diameter; (in cultivation sometimes producing lanceoloid plantlets in the senescing inflorescence, which abscise and later form adventitious roots, thereby starting new plants). **Stems (peduncles):** 1 per rosette, for years hidden beneath leaf bases without visible internodes; upper internodes eventually elongating to become lower half of main inflorescence axis (= peduncle), 90–130+ mm diameter at the lowest internodes, rigid, green, fibrous drying woodlike with persistent, desiccated dead and drying leaves and bracts. **Leaves:** helically alternate, simple, sessile, without stipules, tightly wrapped around younger leaves before fully expanded; blade of basal leaves broadly swordlike to oblanceolate, < 250–1500 × < 60–270 mm but wide-flaring at base, 3–5 mm thick over most of blade but convex-thickened from stem to midblade with succulent tissue 40–100 mm thick at base; blade of lower cauline leaves lanceolate gradually reduced upward where blades appressed and acuminate-triangular (middle and upper cauline leaves), fibrous, spiny dentate on margins (spinose), the points 20–50 mm apart but absent approaching tip, the teeth with broad, truncate bases of leaflike blade tissue + a hard point, each point straight or curved to ± hooked toward blade tip, 2–7(–10) mm long (shorter on cauline leaves), dark purplish red to red-brown, hard terminal spine ca. 30 mm long and purplish red, parallel-veined but venation obscure on surfaces, surfaces often marked with impressions of its own and adjacent leaf margins initially pressed into leaf while in rosette, densely dotted with white, sunken stomates (7×). **Inflorescence:** panicle, terminal, extremely large and open, often with 1000+ flowers, on helically alternate, horizontally spreading, racemelike primary branches, flowering sequence base to tip and along each raceme, bracteate, glabrous; axes green, primary branches 1-sided with flowers oriented upright, overall broadly lanceoloid to ellipsoid in outline and forming flower buds completely before the anthesis of the lowest flowers; bract subtending primary branch = upper cauline leaf, triangular and long-tapered at tip, > 150+ mm long; bract subtending branch at each subsequent fork, gradually reduced upward and along branch, of 3-order branches ca. 25 mm long; bract subtending ultimate branchlet and branchlet subtending pedicel < 10 mm long and ± deciduous during early fruit development; pedicel rigid-cylindric, to 20 × 4 mm in fruit; (sometimes forming plantlets as vegetative clones). **Flower:** bisexual, radial, 50–60 mm across (= horizontal anthers), erect from curving base of ovary (upper side); having an odd, somewhat unpleasant fragrance; protandrous, remaining open days after anthesis; **perianth** 6-lobed with lobes (“tepals”) in 2 whorls, 39–45 mm long; tube cup-shaped and 6-lobed, 7–15 × 15–20 mm, 3 mm thick, green, internally smooth and producing copious nectar at base; lobes ± erect with tips curved slightly inward, fleshy, outer lobes 1–3 mm > inner lobes and overlapping inner whorl, the basal portion ovate and oblong from below midpoint, 24–33 mm long (outer lobes),

greenish yellow, basal portion inrolled to conceal margins of both perianth whorls, the upper portion initially flattish and ca. 8 mm wide but thinner margins becoming inrolled + lobe appearing linear and 2–3 mm wide with thick crest on outer surface, thicker to somewhat hoodlike at tip, on inner surface with a dense tuft of short white hairs at tip and papillate or also with hairs and papillate on margins approaching tip (inner lobes), at anthesis often purplish red at tip (or as flower ages); **stamens** 6, fused to perianth tube just above midpoint with 3 attached ca. 2 mm higher on tube (opposite outer perianth whorl) than other 3 (opposite inner perianth whorl), exerted; filaments ascending, somewhat compressed front-to-back at base to channeled above, long-tapered to anther, 50–70(–90) × 2.5–3 mm, green-yellow, glabrous; anthers exerted > 40 mm above perianth, versatile, dithecal, 28–37 × ± 3.5 mm, greenish yellow, short 2-lobed at base, short-papillate at tip, longitudinally dehiscent; pollen yellow; **pistil** 1; ovary inferior, ± cylindric but shallowly 6-lobed, 32–46 × ± 10 mm, glossy green, slightly constricted neck ca. 6 mm long, glabrous, 3-chambered, each chamber with many ovules attached to center; style exerted, erect, at anthesis 70–81 mm long increasing during pollination, 3.5–4 mm diameter at base, greenish yellow, hollow; stigma terminal, positioned below horizontal anthers, 3-lobed with each lobe shallowly 2-lobed, ca. 5 mm diameter, green, lobes appressed with colorless papillae along edges. **Fruit:** capsule, loculicidal, many-seeded, oblanceoloid to oblong, 55–70 × 21–28 mm (including points on valves to 5 mm long), with 6 tight stacks of seeds in 3 chambers, discharging all seeds, so persistent old fruits seedless. **Seed:** strongly flattened and ± oval to teardrop-shaped in outline, 5–6 × 3.5–5 mm, black. Summer.

Naturalized. Leaf-succulent perennial commonly grown as a landscape plant in southern California (including several varieties and a variegated form), but established at SMMNRA Arroyo Sequit as a small colony growing in undisturbed chaparral, where possibly a rosette was originally planted. *Agave americana* is clonal, and clones can survive for many decades. It forms numerous hemispheroidal basal rosettes from its rhizomes, each rosette bearing dozens of spine-tipped and spine-margined, swordlike leaves. Leaves are tough and fibrous as well as being succulent. Rarely the oldest rosette of a patch, after achieving a large size with enormous leaves and storing great quantity of carbohydrates in the stem and leaf bases, during spring starts to bolt and produces its massive inflorescence with a thousand or more flowers. Flowers begin to open during summer drought. Each flower curves upward, so that the perianth is erect on the branches of the panicle; this helps to contain the copious nectar for pollinations, including many insects but also hummingbirds and bats. Anthers are versatile and twist in the wind or with the force of the pollinator, thereby shedding pollen on the stigma. The rosette of the inflorescence dies as the food reserves are used for flowering, and eventually the entire stalk senesces after fruits have matured and released seeds.

Some individuals of *A. americana* are also capable of asexually producing plantlets from vegetative buds on the inflorescence; these plantlets drop and can also root to form new individuals around the mother plant.

Whereas this description applies specifically to *A. americana* var. *americana*, this variety belongs to a complex of varieties and closely related species having various chromosome numbers, as well as forms that may have measurements and variations in organs that are not covered here. Great care should be taken to identify oddball clones. Also cultivated in range are named variegated forms of *A. americana*, i.e., plants having broad white or yellowish bands (lacking chlorophyll) on each leaf, and these also have the capacity to become escaped.

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