

Vascular Plants of Williamson County

Juniperus ashei – ROCK CEDAR, ASHE JUNIPER, POST CEDAR, MEXICAN JUNIPER
[Cupressaceae]

Juniperus ashei J. Buchh., ROCK CEDAR, ASHE JUNIPER, POST CEDAR, MEXICAN JUNIPER, MOUNTAIN-CEDAR. Small tree to shrub, evergreen, scale-leaved, densely branched on young growth, with new shoot units (adult plant) mostly $< 20 \times 0.9\text{--}1.2$ mm, having 1 trunk (several-stemmed at base), in range to 6.5+ m tall; dioecious; shoots flexible, with leaves mostly in 4(6) vertical rows and \pm 4-sided (4-ranked), having appressed leaves arranged shinglelike, on standard shoots with internodes $<$ leaves and each leaf slightly overlapping adjacent pair of leaves and completely concealing stem, tip of a leaf initially touching blade base of next leaf in vertical row but later further apart, on rapidly growing shoots (whip shoots) with internodes often $>$ blades and blades not concealing internodes, glabrous, with resin canals, strongly aromatic. **Stems:** initially < 0.5 mm diameter (slightly wider on whip shoots), glaucous (leaf bases) on whip shoots; bark on principal branches and trunk peeling in thin, fibrous strips, brown sometimes with conspicuous, large, ash-gray patches. **Leaves:** opposite decussate (standard shoots) and whorled with 3 leaves per node (whip shoots and other vigorous shoots), of different forms on 2 types of shoots, simple, sessile having decurrent base and firmly attached to stem, without stipules; blade ovate, mostly 0.9–1.2 mm long, minutely papillate-jagged on margins, acute at tip (ca. 45°), \pm rounded on back, obscurely veined, at midpoint having a darker, slightly raised, circular resin gland ca. 0.2 mm diameter, resin gland lacking exudate on surface; blade of whip shoot mostly ascending, acuminate to awl-shaped and spinelike, to 4.3 mm long, leaves of whorl not fused at base, entire, on the longer leaves \pm hard-pointed at tip, obscurely veined, at junction of leaf base and blade having slightly raised, circular resin gland, upper surface glaucous, leaf base aging orangish brown and glaucous. **Pollen cones:** spikelike, terminal on scattered, newly formed winter shoots, narrowly ovoid to ellipsoid, $2.6\text{--}4.5 \times 1.7\text{--}2.3$ mm (when releasing pollen), of 8–14 pollen-bearing, opposite decussate microsporophylls in vertical ranks; microsporophylls stalked and umbrellalike (peltate) with surface broadly ovate and slightly domed, to 1.4×1.6 mm, yellowish ochre often tinged orange to reddish with translucent margin, minutely papillate-jagged on margins, with 4 pollen sacs on under surface restricted to the lower half of each microsporophyll, pollen sac light yellow; pollen light yellow, wind-dispersed. **Seed cones:** terminal on new winter shoot, shoot mostly 2–2.5 mm long at pollination, having several pairs of 10 opposite decussate, scalelike leaves beneath cone, blades of upper foliage leaves generally yellowish tinged orange, the lowest pair of shoot keeled and upper ones comparatively cupped, not fleshy, and erect; at pollination young cone to 1.2 mm long, of ca. 4 distinguishable, not fleshy cone scales (scale-bract complex) fused at base, suberect and tinged reddish, collectively having only 1–2 visible ovules, ± 0.35 mm long with a swollen base and narrow at top, pink; mature seed cone (1 year) berrylike and fleshy, 1(–2)-seeded, spheroid to subspheroid (ovoid), $6.5\text{--}9.6 \times 6.2\text{--}8.7$ mm, densely glaucous dark purplish-blue, tips of cone scales \pm inconspicuous, surface wax becoming minutely cracked; flesh resinous when fresh. **Seed:** obovoid (1-seeded cone) to hemiobovoid (2-seeded cone), $4\text{--}5.3 \times 3.4\text{--}4.2$ mm, glossy brown but often found with

semiglossy, translucent, papery cover, sometimes with tannish zone above midpoint, in 2-seeded cone face opposite other seed often flat.

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