

Oleaceae—Olive family

## *Menodora scabra* Gray

rough menodora

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**Growth habit, occurrence, and use.** Rough menodora—*Menodora scabra* Gray—is a low herbaceous to woody shrub 0.2 to 0.8 m in height. It is native to dry rocky areas and desert grasslands from 462 to 2,155 m in southern California, Arizona, New Mexico, western Texas, Colorado, and Utah (Munz and Keck 1965; Vines 1960). It provides browse for livestock and game animals (Krugman 1974). Due to the type of habitat in which it is usually found, it should grow on strip-mined land (Sabo and others 1979). The genus *Menodora* is represented by 14 species in North America (Turner 1991). Rough menodora is recommended for use as a rock garden plant.

**Flowering and fruiting; seed collection and storage.** The yellow, often showy flowers of rough menodora appear from May through August (Krugman 1974; Vines 1960). The fruit, a bispherical thin-walled capsule with 2 seeds in each cell, ripens in September to November. Seeds are dispersed during October and November (Krugman 1974; Munz and Keck 1965; Vines 1960). Seeds should be collected from September to November (Krugman 1974). The mature seeds are about 4 to 5 mm in length and 3 mm wide, flat greenish to brownish with a yellowish narrow wing (Munz and Keck 1965; Vines 1960) (figure 1).

Good seed crops of rough menodora usually occur annually (Krugman 1974). The number of cleaned seeds per weight in 2 samples was 224,000 and 246,000/kg (102,000 and 112,000/lb). Vines (1960) reported that purity was 41% and soundness 98%. Storage in a dry place at room temperature has been satisfactory.

**Germination.** Sabo and others (1979) reported that germination occurred at alternating and constant temperatures between 14 to 40 EC. The best germination (about 80%) was under alternating temperature regimes of 24 EC for 8 hours and 17 EC for 16 hours and 17 EC for 8 hours and 24 EC for 16 hours. The mean day of germination varied from to about 6 to 10 days under these temperature regimes. Light was not required for germination. Percentage and rate of germination of showy menodora—*M. longiflora* Gray—a related half-shrub, was improved by acid scarification. However, at a temperature regime of 30/20 EC, 60% of unscarified seeds germinated. Germination rate of scarified seeds increased with increasing temperature up to 30/20 EC but declined at warmer temperatures. Seeds of showy menodora germinated in the dark, but both germination rate and germination percentage were greater in a light regime with 12 hours light (Fulbright and Flenniken 1986).

## References

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Figure 1—*Menodora scabra*, rough menodora: longitudinal section through a seed, H10.