

'Argaman': a new, highly colored, productive *vinifera* wine cultivar.

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'Argaman' (the Hebrew word for 'deep purple') is a new, highly colored, productive *vinifera*, wine cultivar. Vines of 'Argaman' are vigorous, high yielding and less sensitive than 'Carignan' to powdery mildew (*Uncinula necator* Burr.). 'Argaman' ripens two to three weeks before 'Carignan' with medium size, moderately compact clusters. 'Argaman' varietal wine is deeply colored with satisfactory to average acidity and tannins.



Origin

'Argaman' resulted from the cross 'Souzao' x 'Carignan' made in 1972. It was selected at Bet-Dagan, and subsequently planted in 1984, as selection no. 401, at several test-plots. This is the second release of a wine grape from the Agricultural Research Organization, The Volcani Center (after 'Roy' released in 1988; Israel Plant Patent No. 656/84).

'Souzao' is one of the better varieties of the port-producing regions of Portugal. It is vigorous and productive, and its wines are deeply colored with good acidity (Winkler et al., 1974). It can produce good quality wines from warm sites, and is resistant to fungal diseases (Perold, 1927), however 'Souzao' was unproductive at local sites. 'Carignan' is of Spanish origin, and is one of the important wine varieties. It is very productive, thus useful for making bulk red table wines. However, 'Carignan' wines are of medium acidity and color, and with little varietal character (Winkler et al., 1974).

Description

Grafted vines of 'Argaman' (on Richter 110 and Ruggeri 140R rootstocks) are vigorous and productive with annual spur pruning. In three test plots yields of 21 to 39 t.ha⁻¹ have been obtained. This yield compares favorably with the mean yields of 'Carignan' at the same locations and with the same training systems. Leaves resemble those of 'Carignan' as described by Galet (1976), are dark green, and have five distinct lobes. Compared to

'Carignan' the two lower sinuses are shorter, and the two upper sinuses are broader. The petiolar sinus is medium wide, U-shaped with large teeth, and asymmetrical. Foliage and fruit of 'Argaman' are apparently less sensitive to powdery mildew than 'Carignan', as determined by visual observation.

Flowers are perfect and self fertile. Fruit clusters are medium-sized (280 to 300g), moderately compact, and cylindrical in shape. 'Argaman' ripens about midseason (mid-August to early September), about 1 to 3 weeks before 'Carignan'. Berries are medium-sized (1.48 g), round, and range in color from blue to black, covered with a white waxy bloom.

Each year for five seasons (1988-1992), wine samples from three test plots were made by the Israeli Wine Institute. Wine tastings by a professional panel was blind, and compared 'Argaman' and 'Carignan' from the same vineyards. The wine quality rating (on a scale of 0 to 20, with 20 being the highest achievable score) was composed of visual evaluation, smell, taste, and general aroma. 'Argaman' wines received favorable ratings, much higher than those of 'Carignan', in all 5 years. 'Argaman' varietal wine is deeply colored with satisfactory to average acidity and tannins, of good body and balance. Tests of blending and oak aging have been initiated.

'Argaman' has performed well in the first pilot plantings on the mid-coastal plains, west to the Jerusalem hills, and was further planted in commercial vineyards, mainly as a substitute for 'Carignan'.

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Availability

'Argaman' was registered for breeders' rights as a plant patent No. 950 in Israel in 1992. Cuttings, upon agreement, are available from the [Department for Fruit Tree Breeding & Genetics](#), The [Agricultural Research Organization](#), The Volcani Center, P.O.Box 6, Bet-Dagan 50250, Israel.

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