

## WILD CARDOON VARIATION AND THE DOMESTICATION OF ARTICHOKE

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The genus *Cynara* L., *Asteraceae*, includes eight species and is distributed mainly in the Mediterranean regions where it forms a common and conspicuous component of the flora.

The cultivated globe artichoke (*C. cardunculus* var. *scolymus*) and the cultivated leafy cardoon (*C. cardunculus* var. *altilis*) belong to the same species, together with the wild cardoon (*C. cardunculus* var. *sylvestris*). The three *C. cardunculus* forms are fully cross-compatible with one another, and produce fertile hybrids. Many studies have confirmed wild cardoon to be the ancestor of both cultigens, which evolved independently under the influence of distinct anthropogenic selection criteria: globe artichoke for its capitula, and cardoon for its fleshy leaves and stalks.

The wild cardoon can be further subdivided into two types: the eastern and the western genepools, the former being mainly distributed in Italy, Tunisia, and Greece, while the latter diffused in Spain and Portugal. These two genepools can be distinguished for some morphological traits, e.g. the eastern plants are smaller and produce smaller flower heads with longer spines compared to wild cardoons from the Iberian peninsula. It has been hypothesized that the globe artichoke and the cultivated cardoon were domesticated from the eastern and western wild cardoon, respectively, in different times and places.

In this contribution, we have analysed a high number of Mediterranean wild cardoon populations, together with cultivated cardoon and artichoke materials, using SSR markers distributed over all the linkage groups of the *Cynara cardunculus* genome. Implications for the origin of the two cultigens are discussed.

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