Cynara baetica - New Crop Summary & Recommendations

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Cynara Baetica ssp. maroccana, or the Moroccan artichoke, is an herbaceous perennial, as its common name suggests, from Morocco. It is synonymous with *Cynara Histrix.* They are sun loving, drought resistant perennials that stand about 18 inches. The leaves are opposite and lanecolate, with sharp lobes, menacing thorns, and have a gray-green color. The flowers emerge in July to September, and are an apical, purple spiny bulb, tipped with magenta. (3) Its stem and size make it great as a cut flower, and their drought tolerance makes them a low maintenance option in gardens with decent drainage especially where wildlife may be an issue. Without water they may go dormant in the summer. Their root system is rhizomatous, and they do propagate well from rhizomes. They may prove to be aggressive in gardens due to their roots and prolific seeding. They are a great addition to an edible landscape, and are very popular with insects.

The Cynara genus contains about ten species, and are characterized by their thistle like flowers. The genus is in the Asteraceae family. In general, members of the genus are popular with insects. Members of the genus (including *C. Baetica*) are used in cooking; both the flower and the stem are edible. In some members of the genus, the grain yield is considered promising for a source of biofuel and the byproduct would be usable as animal feed (1), this however does not include *C. Baetica,* though it may become a breeding option in the future, as it is compatible with *C. Cardunculus.*(2)

As previously mentioned, it is native to Morocco, and is hardy to zone eight. It is mostly contained within the area of Morocco to Spain however it has been seen in Brazil (4). They're not particularly picky to environments as long as they are in well drained soil. They have been collected in elevations as high as 4200 feet (5), and will grow around 30 degrees north latitude as long as it is dry. The seeds do tend to germinate better when exposed to smoke, so their natural habitat is likely somewhere very dry and prone to fires. As previously mentioned, they can be invasive due to their spreading nature and high amounts of seed.

Propagation of *C. Baectica* is straight forward. It will grow from seed without treatment, in well drained soil in green house conditions. However germination is aided by being exposed to smoke or GA. The plant will also grow from root stock. Unaided germination tends to be on the low side; around 50 percent, likely due to its tendency to compete and grow only in the right conditions. They will take a long time to germinate, around 14 to 30 days, and will germinate in well drained soil at 10 degrees Celsius. The prime downfall of this plant is that it is a thistle that will spread itself by seed. If through plant breeding, this plant were to have a sterile cultivar, it would be worth much more than it is wild.

This product is generally on the market as seed, and if planted outside, in most places will bloom June to September, then go dormant. As previously mentioned, members of its genus have been tested for a source of bio fuel. The marketability of this plants lies mostly in its low maintenance needs and resistance to wildlife. All of those things considered, *C. Baetica*'s lack of popularity is most likely based on people reluctance to plant thistles in one's garden. They could be a unique addition to an edible landscape, if either the plant was not allowed to go to seed or the grower didn't mind the spread of wild thistle in the area. This plant could become a good landscape alternative in places with very poor soil, where they could compete with Lavender, Yarrow, or Sage. However in places where this is a perennial and not an annual, it can grow up to six feet high over the course of about three years.

To produce this crop in a greenhouse, begin by treating seeds with GA and/or liquid smoke, to increase the germination count and possibly reduce the two to four weeks the plant needs to germinate.

Plant in well drained soil about 13 mm deep. Water sparingly and maintain 10 degrees Celsius. When the plants emerge, move to a much warmer area and maintain sparse watering. Plant growth regulators for this plant are generally unnecessary, but gibberellins could be used to induce stretching of stems for better cut flowers. They will not experience many pests or disease, even if over watered. They do have a tap root, so a larger, deeper container for sowing and transplanting is preferable. Based on my success growing them, they will need about ten weeks to fully develop their first pair of true leaves. This would give the plant a fighting chance outside however with hotter conditions and less water, the plant could probably thrive and be ready sooner. For landscape, this plants can be finished and ready for market later than most perennials, based on its preference of hot weather, even as late as June, as that is the beginning of their flowering period and they will like the hotter weather. The cut flowers are stunning, however not necessarily represent of any one holiday or event. Not much information is found by gardeners, growers, or florists on this product, so this could be a new oddity for people.

Works Cited:

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