

A Wild *Medicago arborea* Population in Cassis, France

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Through working with Dr. Edwin Bingham at the University of Wisconsin-Madison, I have experience in *Medicago arborea* and *M. sativa* × *M. arborea* hybrid cultivation, propagation, and cross-pollinating in a greenhouse setting, along with field management and microscopic study of the species. For three weeks during December 2004 and January 2005 I traveled to the Provence region of France. Provence is located in southeastern France and borders the Mediterranean Sea. I took a day trip to climb the Calanques (sea cliffs) of Cassis, a small city on the coast approximately 30 km east of Marseille. I was on the look-out for wild or cultivated *M. arborea* but I was not expecting to find the number of plants that I walked into.

While walking along the approximately half kilometer long and 5 to 15 meter wide strip of rocky, sloped land between the cliff and sea shore in the middle of the city next to the harbor, I found around 100 *M. arborea* plants scattered in groups with a few other prominent species that I was not able to identify. The plants were in different stages of flowering, fruiting, and “normal growth,” including many plants with mature, dried pods. The plants were shrub-like, with a woody trunk with a diameter the size of a human wrist. The plants that were flowering had many times the number of flowers per main shoot than we have been able to procure in the greenhouse. It was no surprise that the plants were reproducing at this time because the winters in this Mediterranean climate receive a relatively large amount of precipitation compared to the summers. This population also must have some sort of cold tolerance because the temperatures at night do occasionally fall around 0 deg. C.

Below are some pictures taken in Cassis of the plants with brief descriptions.



Fig. 1: The yellow-flowered, bright green-leaved *M. arborea* grows among other Mediterranean shrubs between the sea and small cliffs in the middle of the city of Cassis, France.



Fig. 2: As in Fig. 1, but taken of plants a few meters east of those in Fig. 1.



Fig. 3: A few branches of one *M. arborea* plant poking through the whitish, unknown competing plant.



Fig. 4: The trunk of a typical *M. arborea* from the seaside population. Compare trunk size to the author's wrist. This is a picture of a *M. arborea* trunk, not of the pale-leaved shrub in the foreground.



Fig. 5: The author, blinded by the winter morning Mediterranean sun, standing in front of a plant in full bloom. The background shows the beginning of the harbor and part of the city of Cassis.



Fig. 6: A beautiful shot of a large cliff to the east of the city. The famous Calanques are to the west of the city.