





Photo 2. *Desmostachya bipinnata* planting at the International Centre for Biosaline Agriculture (ICBA)

## Materials and Methods

Between 2007-13, the authors undertook a number of expeditions throughout the UAE to document the local wild flora, with a focus on plant species considered to be rare. *Desmostachya bipinnata* (L.) Stapf was noted by A. R. Western once at Kalba, an East Coast town in the emirate of Sharjah (Jongbloed, 2003). The authors conducted many visits during 2007-09 to the Kalba area to search for the species, but without success. In 2007, however, they were able to locate about 50 plants of *D. bipinnata* growing at about 200 metres from the coast in Ra's al-Khaimah emirate (25°38 34 N, 55°44 03 E; Picture 1). The species was growing in association with other plants, including *Zygophyllum qatarense*, *Cornulaca monacantha* and *Heliotropium digynum*, in a sandy soil.

Seeds of five *D. bipinnata* plants were collected from the site and tested for germination at the seed laboratory of International Centre for Biosaline Agriculture (ICBA), Dubai, UAE. The results indicated that the seed of the species from Ra's al-Khaimah was not viable. Subsequently one plant with its roots was carefully removed from the site. All of its tillers with roots were separated meticulously and planted separately at the ICBA field research facilities in May 2008.

## Results

In 2013, the research team from ICBA revisited the *D. bipinnata* site in Ra's al-Khaimah, but no plants of the species were found. The area had been cleared for construction. With the elimination of the flora from the site, the last-known *D. bipinnata* plant in the UAE had gone.

Planting of *D. bipinnata* at ICBA was, however, successful (Photo 2). The species has established well in the field and propagates through rhizomes. It began flowering two months after being transplanted at the Centre.

## Conclusion

Development in different parts of the UAE is having a deleterious effect on the country's native flora. Due to the extent of new construction, especially in areas close to cities and towns, many wild plant species are rapidly being lost, the loss of *Desmostachya bipinnata* in its natural habitat in the country is one example. The UAE ecotype of the species is being protected at ICBA and can be reintroduced to the wild in the future, with the help of relevant agencies.

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