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Allium commutatum Guss. - El Kala, Algeria

***Allium commutatum* Guss. and the « small islands specialist » plants species of the Western Mediterranean.** The Mediterranean is a very large sea famous for its numerous small islands. Even if the western basin is mostly known for its big and beautiful islands, it contains more than 1000 small islands, often less than 1000 ha wide. Current enthusiasm in exploring very small islands (sometimes rocks no more than one hectare) is particularly supported by the “PIM initiative” of French “Conservatoire du Littoral”. By boat, swimming or sometimes by feet, most of them were scientifically explored for the first time and a lot are still to be explored. One of the major surprises was the recurrent discovery of some plant species considered extremely rare or not yet known on the continent. *Allium commutatum* Guss., a steno-Mediterranean rare Amaryllidaceae, was recently discovered as new for Tunisia and Algeria thanks to its presence on very small islands, and recent explorations led to confirm its presence also on the continent (Africa), on inaccessible rocks with few vegetation cover. In SW-Sardinia, out of the six known localities, five are on peripheric small islands and one on a Cape of the main island. Around Corsica, more than twenty islets are concerned. In Corsica and mainland France, the species is rarely pure and most often hybridised with *A. polyanthum* Schult. & Schult. f., a common ruderal plant. Even within the small islands archipelago of La Galite or Zembra in Tunisia, *A. commutatum* is located on the smallest islets, while *A. polyanthum* is growing on the main island. Among its special properties, *A. commutatum* is known to have some bulblets resistant to seawater. *Nananthea perpusilla* (Loisel.) DC., an extremely rare Corso-Sardinian endemism and monotypic genus of Asteraceae, is the most famous and best studied small islands specialist plant species. *Stachys brachyclada* De Noé, a western Mediterranean rare Lamiaceae, is distributed from France (three islets near Marseille) until Chafarinas archipelago (opposite to Moroccan coast) and is very limited on the mainland. *Fumaria munbyi* Boiss. & Reut., a south-western Mediterranean rare Papaveraceae, was indicated in the past on the continental littoral but is currently known mainly on Habibas archipelago (Algeria) and Columbrete archipelago (Spain). *Hymenolobus procumbens* subsp. *revelieri* (Jord.) Greuter & Burdet, a western Mediterranean rare Brassicaceae, may be a good candidate but, because of taxonomical difficulties, its exact distribution is still not known. Of course, a lot of narrow endemic species restricted on one or a few islands are *de facto* small islands specialist, but for the species with relatively large distribution, this phenomenon is still poorly known and understudied. Avoiding concurrence of species from mainland is probably a major cause, not only competition from species with the same ecological niche but also genetic aggressiveness of parent species. Furthermore, Humans artificialise the mainland littoral more easily than inaccessible islets. Dispersal capacities of small islands specialist should be explored in light of those species preferring the mainland. Genetic pattern and historical relations between populations from such remote small islands are misunderstood and represent a challenge.

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