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REDISCOVERY OF *ORNITHOGALUM DIVERGENS* BOREAU (HYACINTHACEAE) IN MALTA (CENTRAL MEDITERRANEAN)

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ABSTRACT

Ornithogalum divergens had not been reported from the Maltese islands since 1927 and was presumed to be extinct here. Recently the species was rediscovered at the Buskett woodland and a new population was recorded at Girgenti.

Ornitogalum divergens Boreau is a species of S. Europe, extending northwards to Slovakia and to 49° in France. It grows in dry pastures and waste places. The taxon used to be included in O. umbellatum L. from which it differs by possessing small bulbils around the main bulb which remain dormant for at least a year and by the fruiting pedicels being patent or \pm deflexed (Tutin et al., 1980). Two other Ornithogalum species occur in the Maltese islands. O. narbonense L. can be distinguished from O. divergens by the spicate inflorescence whilst O. arabicum L. can be distinguished by the large flowers and conspicuous black ovary (Haslam et al. 1977).

In Malta the species was recorded for the first time by Caruana Gatto (1890) in April 1890 from "Uied Kerda" (Wied Qirda) while botanising with G. Henslow and provisionally identified "Ornithogalum excapum Ten. (?)", which is a different species but, according to Sommier & Caruana Gatto (1915), is to be equated with O. divergens. Later Sommier & Caruana Gatto (op. cit.) record it from Wied Qirda and Buskett and cite a record by Borg from Wied Incita. The last published records from the wild are by Borg (1927) from the same locations. A specimen dated April, 3. 1939 by M. E. Delia is preserved in the Argotti herbarium in a folder named 'Maltese Flora'. No location is given for that specimen but it may have been collected from cultivated specimens growing at Argotti Botanic Gardens (Joseph Buhagiar, personal communication) where the species used to grow until the 1980s.

The species is not mentioned in Lanfranco, G. (1969). Under the name *Ornithogalum umbellatum* L. it is included in a list of 'Plants which have not been recorded for a considerable time and may be presumed to be extinct or on the verge of extinction.' by Lanfranco, E. (1976). Haslam *et al.* (1977) cite only the old records by Borg and Sommier & Caruana-Gatto. Lanfranco, E. (1989) states that the plant has not been seen in the wild for several decades.



Fig. 1: Ornithogalum divergens, Buskett © Martin Psaila



Fig. 2: O. divergens flower, Girgenti © Sdravko Vesselinov Lalov

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On the 7th April 2004 one of the authors (MP) discovered an *Ornitogalum divergens* specimen in a clearing at Buskett woodlands. On the 31th March 2005 two plants were present in the same location (MP&EL). In March 2006 15 individuals in flower were recorded in that area by TT and on the 30th March a single plant was found by AC in a different area of Buskett. On the 28th March 2006 a population consisting of seven individuals was discovered in abandoned fields at Girgenti by SVL. While this is the first record for the species from Girgenti the plants can be seen as a continuation of the, apparently widespread, Buskett population.

Since *Ornithogalum divergens* is not easily overlooked when in full bloom it is not clear why several populations were discovered in such a short period after the species had not been recorded for at least 77 years in the Maltese islands. When in flower the plant is conspicuous enough to attract even the attention of a casual observer and certainly that of a botanist. It flowers at a time of the year when most botanists and nature enthusiasts are roaming the countryside and at least the populations at Buskett grow in areas often visited by plant enthusiasts. A recent reintroduction is improbable, especially in the quite remote area of Girgenti. It is possible that the species has been overlooked because each flower opens for a very short period. When all flowers are closed only the greenish abaxial side of the tepals is visible and the plants are extremely hard to find in dense vegetation, a fact which rendered a second count of the Girgenti population on April, 1 impossible (SVL). Another probable reason for the numerous new records could be an increase in population size or in the number of flowering individuals due to climatic or other reasons or possibly the greater number of people capable of identifying wild plants. Surveys carried out by one of the authors (SVL) at Wied Incita and Wied Qirda where the species had been recorded by Sommier & Caruana Gatto (1915) and Borg (1927) yielded negative results.

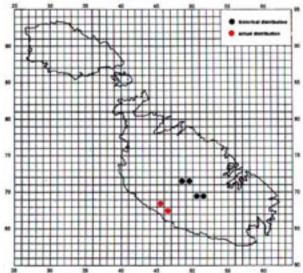


Fig. 3: Distribution of Ornithogalum divergens in Malta (UTM, zone 33S, 1 km x 1 km grid)

Because of the overall small population size of *O. divergens* in Malta and because of its potential value as an ornamental *ex-situ* propagation measures could play an important part in its conservation. Propagation by bulbils or by seeds as well as micropropagation has been suggested. In *O. divergens* the bulb is surrounded by dormant bulbils (Tutin *et al.* 1980) which could be removed and cultivated. An attempt by SVL to check for seeds in the Girgenti population in June 2006 failed since the plants could not be located any more due to the dense vegetation. It is not clear if the species produces viable seeds in Malta or if it depends only on propagation by bulbils.

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