

## THE REDISCOVERY OF *ASPLENIUM TRICHOMANES* L. (FAM. ASPLENIACEAE) IN THE MALTESE ISLANDS. (CENTRAL MEDITERRANEAN)

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### ABSTRACT

*Asplenium trichomanes*, last recorded during the first 2 decades of the twentieth century and thereafter thought to be extinct, was rediscovered at Fuq tal-Gruwa, Ta' Cenc area, Gozo; 15 individuals were found. The accompanying garigue vegetation occurring at the site is described. The plants found belong to the subspecies *quadrivalens*.

*Asplenium trichomanes* L. was recorded in the past from: Mgarr ix-Xini, Gozo (Duthie 1875, later cited by Gulia 1909, Sommier & Caruana Gatto 1915, Borg 1927, Haslam et al. 1977); Wied Babu (Gulia 1872b, later cited by Gulia 1909, Sommier & Caruana Gatto 1915, Haslam et al. 1977); Ghajn Rihana (Borg in Sommier & Caruana Gatto 1915, later cited by Haslam et al. 1977); "Gebel Sornu near Ghajn Rihana" (Borg 1927). Thereafter the species was presumed extinct (Lanfranco 1989), as it was "not seen for at least 70 years".

On the 18th October 2005 the author discovered 10 individuals of *Asplenium trichomanes* at Fuq tal-Gruwa, Ta' Cenc area, Gozo. Another 5 specimens were found at the same site the following December, bringing the total population number to 15. The site in question is a Globigerina limestone escarpment (early Miocene) at an altitude of 122 - 130m, facing North and thus well shaded throughout most of the day. The karstic landscape consists of garigue vegetation with small patches of regenerating low maquis. *Rhamnus oleioides* L., *Teucrium fruticans* L. and *Asparagus aphyllus* L. dominate in different patches; *Thymra capitata* (L.) Cavanilles is sub-dominant. Other important accompanying species are *Lobularia maritima*

(L.) Desvoux, *Ferula communis* L., *Foeniculum vulgare* L., *Smyrniolum olusatrum* L., *Prasium majus* L. and *Asphodelus aestivus* Brotero. Also present are: *Clematis cirrhosa* L., *Ranunculus bullatus* L., *Parietaria judaica* L., *Silene colorata* Poir., *Hypericum aegypticum* L., *Erica multiflora* L., *Euphorbia pepus* ssp. *peploides* (Gouan) Rouy, *Euphorbia pinea* L., *Sedum caeruleum* L., *Umbilicus* sp., *Anthyllis vulneraria* L., *Lotus cytisoides* L., *Lotus edulis* L., *Medicago* spp., *Ruta chalepensis* L., *Linum strictum* L., *Oxalis pes-caprae* L., *Daucus carota* ssp. *carota*, *Asperula aristata* L., *Valantia muralis* L., *Olea europaea* L., *Scabiosa maritima* L., *Cuscuta epithymum* L., *Satureja microphylla* (D'Urville) Benth., *Satureja nepeta* (L.) Scheele, *Teucrium flavum* L., *Plantago lagopus* L., *Campanula erinus* L., *Aetheorrhiza bulbosa* (L.) Cassini, *Bellis sylvestris* Cyrillo, *Carlina involucreta* Poir., *Chiliadenus bocconeii* Brullo, *Dittrichia viscosa* (L.) Greuter, *Galactites tomentosa* Moench, *Hyoseris radiata* L., *Leontodon tuberosus* L., *Reichardia picroides* (L.) Rothmaler, *Sonchus oleraceus* L., *Scilla autumnalis* L., *Urginea pancracion* (Steinheil) Philippe, *Catapodium rigidum* (L.) Hubbard, *Arisarum vulgare* Targioni-Tozzetti; the lichens *Cladonia convoluta* (Lamarck) Anders, *Cladonia rangiformis* Hoffmannsegg, *Rochella phycopsis* E. Acharius, *Squamarina cartilaginea* (W. Withering) P. James; the mosses *Scorpiurum circinnatum* (A. Bride) A. Fleischback, *Tortella* sp. Another 2 *Filicopsida* occur in close proximity: *Adiantum capillus-veneris* L. (common) and *Anogramma leptophylla* (L.) Link (infrequent).

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Past records of *Asplenium trichomanes* did not specify the subspecies occurring. One specimen collected from the site, now conserved in the private herbarium of Mr. E. Lanfranco, has been ascribed to the subspecies *quadrialeans* D.E.Meyer (Spore size: 50 µm). Photographs have also been kept in the author's collection.

*Asplenium trichomanes* is critically endangered in the Maltese islands, the population found being only a few metres away from building development.

The other *Aspleniaceae* also recorded from the Maltese islands are: *Asplenium ceterach* L. (very rare), *Asplenium marinum* L. (extinct), *Asplenium sagittatum* (DC.) A.J.Bange (extinct) and *Asplenium scolopendrium* L. (unsubstantiated record).

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