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## *ELYTRIGIA REPENS* (L.) DESVAUX EX NEVSKI (FAM. POACEAE), A NEW RECORD FOR THE MALTESE ISLANDS

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## ABSTRACT

The discovery of an indigenous population of *Elytrigia repens* extending for 420m through the valleybed of Wied il-Ghasri, Gozo, is reported. The accompanying vegetation is described. The species' distributional range and local status are also given.

Keywords: Elytrigia repens, Wied il-Ghasri, Gozo, valleybed, watercourse flora, ruderals, endangered species.

On the 30th September 2000, the author discovered a population of *Elytrigia repens* (L.) Desvaux ex Nevski (= Agropyron repens (L.) Beauvois; Elymus repens (L.) Gould in the valleybed of Wied il-Ghasri, Gozo. The valley bed in question consists of Globigerina limestone (early Miocene), at an altitude of approximately 45 - 55m, and harbours a semi-permanent watercourse resulting from rainwater run-off from the surrounding hills clay strata. The Elytrigia repens population extends intermittently for approximately 420m, starting a short distance from behind the il-Madonna tal-Patrocinju Basilica. It is the dominant species in many watercourse stretches, mainly in the last 150m, subdominant with Schedonorus arundinaceus (Schreber) Dumortier in some stretches, and absent in parts overrun with ruderals, where the dominant species are: Atriplex prostrata DC., Rumex cristatus DC., Oxalis pescaprae L., Tropaeolum majus L., Foeniculum vulgare L., Aster squamatus (Sprengel) Hieronymus, Galactites tomentosa Moench, Paspalum paspaloides (Michxaud) Scribner, Arisarum vulgare Targioni-Tozzetti and Arum italicum Miller. Although only one specimen of Persicaria lanigera (R.Brown ) Sojak was found on the date of discovery (see above), during a site visit on the 9th November 2006, the species was found to have multiplied as to dominate a stretch of 15m. Other important accompanying species are the typical watercourse species: Nasturtium officinale R.Brown (only in flooded patches during late spring), Trifolium fragiferum L., Carex divisa Hudson, Carex pairaei F.Schultz, Polypogon monspeliensis (L.) Desfontaines; the ruderals: Spergularia bocconei (Scheele) Graebner, Sinapis alba L., Borago officinalis L., Verbena officinalis L., Dittrichia viscosa (L.) Greuter. Also present were: Parietaria judaica L., Polygonum aviculare L., Diplotaxis erucoides (L.) DC., Sinapis arvensis L., Anagallis arvensis L., Lavatera cretica L., Geranium molle L., Apium nodiflorum (L.) Lagasca, Galium aparine L., Centaurium pulchellum (Swartz) Druce, Mentha pulegium L., Solanum nigrum L., Veronica anagallis-aquatica L., Plantago lagopus L., Calendula arvensis L., Glebionis coronaria (L.) Tzvelev, Limbarda crithmoides (L.) Dumortier, Sonchus oleraceus L., Bromus hordaceus L., Cynodon dactylon (L.) Persoon, Piptatherum miliaceum (L.) Cosson, Polypogon viride (Gouan) Breistroffer and Setaria adhaerens (Forsskal) Chiovenda.

*Elytrigia repens* is circumboreal, occuring in Europe, temperate Asia, Siberia, Iraq, Iran, Afghanistan and North Africa; introduced to North America (Maire 1955; Sherif & Siddiqi 1988; Pignatti 1997; USDA *online*). Thus the Maltese Islands are well within the species' distributional range. The extensiveness and fragmentary character of the Gozo population is indicative of a dwindling long-established colony. These two factors, coupled with the occurrence in a non-anthropogenic habitat, indicate that the newly discovered population is indigenous. The

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subspecies occurring has not yet been ascertained. A specimen has been deposited in the private herbarium of Mr. E. Lanfranco.

*Elytrigia repens* is endangered in the Maltese Islands, as Wied il-Ghasri is being severely degraded by eutrophication in the watercourse, debris dumping, bulldozing and the cultivation of exotic trees, resulting in the indigenous watercourse flora being usurped by nitrophilic weeds. For example, no typical watercourse flora occurs in the initial 105m, the valleybed being dominated by cultivated *Ficus australis* Willdenow, *Eucalyptus* sp., *Arundo donax* L. and naturalised *Ricinus communis* L. Here, *E.repens* does not occur in the watercourse but along a 30m long stretch of well-shaded valleybed rocky pathway.

Other *Elytrigia* species recorded from the Maltese Islands are: *E.atherica* (Link) Kerguelen ex Carreras (very rare), *E. flaccidifolia* (Boissier & Heldreich) Holub (very rare) and *E.juncea* (L.) Nevski (infrequent).

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