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關鍵詞或 Keywords : XXX、XXX、XXX、XXX、XXX

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標題：The interaction of parasites and resource causes crashes in a wild mouse population.

關鍵詞：glucocorticoids, host-pathogen interaction, macroparasites, *Quercus*, resource pulses.

注意此例中的 host-pathogen interaction, macroparasites, resource pulses 是屬於概念相近的詞語，進一步解釋了何謂標題中的 interaction (= host-pathogen interaction), parasites (= macroparasites), resource (= resource pulses) ; glucocorticoids, *Quercus* 為研究方法與物種。

參考資料 或 Reference

說明：請列出 3 至 5 篇為了研讀這篇文章所額外參考的文獻，請統一用與文獻來源同樣的 SCI 期刊之格式。

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建議篇幅：約 1-2 頁

中英文皆可，請務必在繳交前從頭到尾唸一遍，避免錯誤的用字、不順暢的文句與漏掉的引用文獻。

下頁為一完整範例。請注意參考資料中第一篇為書本中特定章節的引用，與一般期刊文章引用稍有不同。同時，請注意本範例如何依序陳述論文的問題、假說、方法、結果、討論等：

問題與假說 (第一到第四句) : *Oxalis pes-caprae* is... the Mediterranean Basin.

方法 (第五到第七句) : Fifty-five populations of *O. pes-caprae*...using flow cytometry.

結果 (第八到第十三句) : From the populations studied 89.1 % ... sterile form were tetraploid.

討論 (第十四到第十五句) : The low or null sexual... information for management programmes.

Distribution of Flower Morphs, Ploidy Level and Sexual Reproduction of the Invasive Weed *Oxalis pes-caprae* in the Western Area of the Mediterranean Region

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Source

Castro, S., J. Loureiro, C. Santos, M. Ater, G. Ayensa, and L. Navarro. 2007. Distribution of flower morphs, ploidy level and sexual reproduction of the invasive weed *Oxalis pes-caprae* in the western area of the Mediterranean region. *Annals of Botany* **99**: 507-517.

Summary

Oxalis pes-caprae is a widespread invasive weed in regions with a Mediterranean climate. In its native habitat (southern Africa) this species has been reported as heterostylous with trimorphic flowers and a self- and morph-incompatible reproductive system. In most of the areas invaded, only a pentaploid short-styled morphotype that reproduces mainly asexually by bulbils is reported, but this has only been confirmed empirically. This study aims to analyse the floral morph proportions in a wide distribution area, test the sexual female success, and explain the causes of low sexual reproduction of this species in the western area of the Mediterranean Basin. Fifty-five populations of *O. pes-caprae* were sampled in the Iberian Peninsula and Morocco to evaluate the floral morph ratio and individual fruit set. In plants from a dimorphic population, hand-pollination experiments were performed to evaluate the effect of the pollen source on pollen tube growth through the style. The ploidy level and genome size of individuals of each floral morph were analysed using flow cytometry. From the populations studied 89.1 % were monomorphic, with most of them containing the short-styled (SS) floral morph, and 10.9 % were dimorphic containing long-styled (LS) and SS morphs. In some of these, isoplethy was verified but no fruit production was observed in any population. A sterile form was also recorded in several populations. Hand-pollination experiments revealed that pollen grains germinated over recipient stigmas. In intermorph crossings, pollen tubes were able to develop and fruit initiation was observed in some cases, while in intramorph pollinations, pollen tube development was sporadic and no fruit initiation was observed. All individuals within each floral form presented the same DNA ploidy level: SS plants were pentaploid and LS and the sterile form were tetraploid. The low or null sexual reproduction success of this species in the area of invasion studied seems related with the high frequency of monomorphic populations, the unequal proportion of floral morphs in dimorphic populations and the presence of different ploidy levels between SS and LS morphs. The discovery of the occurrence of an LS floral morph and a sterile form, whose invading capacity in these areas is as yet unknown, will be valuable information for management programmes.

Keywords: Flow cytometry, genome size, heterostyly, invasive plant, *Oxalis pes-caprae*, ploidy level, reproductive biology, weed

Reference:

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