重光潮間帶卵葉鹽草種子庫季節性變化

冼宜樂*、楊子泰、許思婕、鐘冠翔、林連蒂、謝恆毅 農業部水產試驗所澎湖漁業生物研究中心

摘要

生長在重光潮間帶的卵葉鹽草 (Halophila ovalis) 4 季種子平均密度介於 12.3-21.3 顆/m²之間,以夏季的密度最高,冬及春 2 季最低;3 條測線種子平均密度以 C 測線 268 顆/m²最高,A 測線 56 顆/m²最低。冬、春 2 季未發現種子萌芽現象,也未發現花果,以種子庫型態蟄伏於底土中,密度變化不大。夏季為果實期高峰 (5-7 月間),釋放大量種子,達全年高峰。加上夏季高溫和颱風強降雨,種子之種皮已有裂開或脫落,子葉已有突起等萌芽的現象。秋季所檢測的 3 條測線種子密度互有消長,A 及 B 這 2 條測線密度均有增加,C 測線的密度則出現下降的現象,應與種子萌芽使密度下降有關。

關鍵字:海草、卵葉鹽草、草種子庫

Seasonal changes in the seed bank of Halophila ovalis in the Chongguang intertidal zone

Yi-Le Shian*, Zi-Tai Yang, Si-Jie Xu, Kuan-Hsiang Chung, Lian-Di Lin, Hern-Yi Hsieh Penghu Fisheries Biology Research Center, FRI, MOA

Abstract

The seasonal average seed density of *Halophila ovalis* growing in the Chongguang intertidal zone ranged between 12.3-21.3 seeds/m², with the highest density observed in summer and the lowest in winter and spring. Among the three surveyed transects, the average seed density was highest at transect C (268 seeds/m²) and lowest at transect A (56 seeds/m²). No seed germination or flowering was observed during winter and spring, with seeds remaining dormant in the sediment as a seed bank, showing low density fluctuations.

Summer (May–July) marked the peak fruiting period, during which a large number of seeds were released, reaching the annual maximum density. The high temperatures and heavy rainfall associated with typhoons in summer resulted in seed coat rupture or detachment, with cotyledon emergence indicating germination activity. In autumn, seed density across the three transects exhibited varying trends, with densities in transects A and B increasing, while that in transect C declined, likely due to germination, which reduces the seed bank density.

Keyword: seagrass, *Halophila ovalis*, seed bank