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The State of health of *Posidonia oceanica* meadows in two localities of the Mostaganem coastal area (Stidia and Hadjadj - Algeria)

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The studies relating to the *Posidonia oceanica* meadows near the western coast of Algeria (Mostaganem) are practically non-existent.

In order to characterize the state of health of a *Posidonia oceanica* meadow of the coastal fringe of Mostaganem, measurements of the shoot density and a follow-up of the phenological parameters were carried out near two localities (Hadjadj and Stidia) at mean depth of 3 m, from February to July 2011. In Stidia area, The meadow develops on a rocky substratum with an average percentage of covering; contrary in Hadjadj area, the meadow is installed on soft bottom substrate with a small percentage of covering. An average densities of 359.47 shoots/m² and 266.10 shoots/m² were obtained respectively in Hadjadj and Stidia areas. That means that the meadows of the two localities have abnormal densities. The phenological parameters in the two localities present an increase at the end of spring – beginning of summer (May and June) and a reduction in the end of winter - beginning of spring (February and Mars). Thus, the *Posidonia oceanica* meadow of Hadjadj area has a better vitality compared to the one of Stidia; though both meadows of the studied areas shows a light sign of disturbance dues to their weak shoot densities.

Key words: *Posidonia oceanica*, phenology, density, Mostaganem, vitality.