

# Integration of Aerial Remote Sensing, Photogrammetry, and GIS Technologies in Seagrass Mapping

Vanina Pasqualini, Chistine Pergent-Martini, Philippe Clabaut, Hervé Marteel, and Gérard Pergent

## Abstract

*With a view to implementing a sound management of littoral plant formations, and more particularly that of seagrass beds, it would appear of interest to test the potentiality of image processing for various types of photographs (color, infrared, and black and white). The present study was carried out within the Gulf of St-Florent (Corsica, France) on a Posidonia oceanica reef platform. Over the last 40 years, no major diachronic evolution has been observed within this plant formation. An erosion of the coastline has been noted inland of these seagrass beds, however, with erosion values of up to 40 m. The use of photogrammetric techniques, which are new to the marine environment, allows the possibility of obtaining a numeric model of a given site. The comparison of cartographic and bathymetric data, brought together in a geographic information system, allows the spatial distribution of sea grasses to be evaluated for the first time.*

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V. Pasqualini, C. Pergent-Martini, and G. Pergent are with the Université de Corse, Equipe «Ecosystèmes Littoraux», B.P. 52,20250 Corte, France ([vanina.pasqualini@bioeco.u-3mrs.fr](mailto:vanina.pasqualini@bioeco.u-3mrs.fr)).

V. Pasqualini is also with the Université de Provence - Centre de St. Jérôme, IMEP, UPRESA CNRS 6116, LBEM, Case 421 bis, Av., Escadrille Normandie Niemen, 13397 Marseille Cedex 20, France.

P. Clabaut is at 14 rue P. Doumer, 59 110 La Madeleine, France.

H. Marteel is at 291 Bd. Clémenceau, 59700 Marcq en Baroeul, France.

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