

NICHE MODELS OF INVASIVE SEAWEED SPECIES: PREDICTING SPREAD AND AREAS AT RISK OF SUFFERING BLOOMS

Verbruggen Heroen¹, Klaas Pauly¹, Lennert Tyberghein¹, Frederic Mineur² and Christine A. Maggs²

¹ Universiteit Gent, Vakgroep Biologie, Afdeling Algologie
Krijgslaan 281, gebouw S8, 9000 Gent, Belgium
E-mail: heroen.verbruggen@ugent.be

² Queen's University of Belfast, School of Biological Sciences,
97 Lisburn Road, Belfast BT9 7BL, United Kingdom

We explore macro-ecological niche models for a selection of alien and bloom-forming species, including *Codium fragile*, *Sargassum muticum* and *Caulerpa racemosa*. Niche modeling techniques are used to predict the potential distribution range of species. They infer the macro-ecological affinities of the species using two datasets: a set of distribution records and a global macro-ecological dataset derived from satellite images. Niche affinities inferred from distribution records within the native range are extrapolated to identify areas in the invaded range with suitable habitat for the species.