



Diversity of drift macroalgae in Aruba, Netherland Antilles, Caribbean Sea, including the rarely reported deep-water species *Dasya puertoricensis* and *Cottoniella filamentosa* (Delesseriaceae, Rhodophyta)

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With 8 figures and 2 tables

Abstract: Drifting and wrack seaweeds may originate from the detachment of natural populations and transport by currents until reaching the coast. When this is part of the natural renewal process of the seaweed beds, the drift is normally multispecific. Monospecific drifting biomass are, on the contrary, originating from excessive blooming of ephemeral and opportunistic species and generally are a consequence of anthropogenic impact. Drift and wrack algae were collected at four sites at Aruba for a taxonomic survey of the floating flora in the area. A total of 72 species were identified: 7 species of Cyanophyta, 38 species of Rhodophyta, 13 species of Phaeophyceae, 12 species of Chlorophyta, and two Angiosperms. Of these, forty species are new records for Aruba. With this study, the macroalgal flora of Aruba reaches 205 taxa. *Dasya puertoricensis* is reported for the first time outside its type locality. At Eagle Beach the drift was dominated by deep-water species.

Keywords: Aruba; floating macroalgae; floristic study; new records

Introduction

Drift algae originate when detached macroalgae are removed from their substrate through physical processes (storms, waves, abrasion), or by herbivores through the feeding process (Liss 2004). Communities of drift algae are common and found throughout the world's oceans (e.g., Norton & Mathieson 1983, Virnstein & Carbonara 1985, Lobban & Harrison 1994, Dawes 1998). As freely moving organisms, drift algae passively disperse with currents (Norton & Mathieson 1983, Virnstein & Carbonara 1985) and provide substrate, food and shelter for a variety of micro- and macrofauna (Norkko et al. 2000, Van-