ASSESSING NUTRIENT SUPPLY FROM SOUTH AFRICAN MARINE AQUACULTURE

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Aquatic foods are crucial sources of high-quality proteins, essential amino acids, omega-3 fatty acids, and essential micronutrients such as vitamins A, B_{12}, D, and minerals including iron, calcium, zinc, and selenium. Despite their critical role in human nutrition and health, they often receive insufficient attention in food system discussions, which primarily focus on agriculture and livestock. In many regions, capture fisheries and aquaculture are managed primarily for economic gains, thereby not fully leveraging their potential to enhance food security and wellbeing.

This study analysed the nutritional composition of the marine species cultivated in South Africa and quantified the nutrient supply they provide. The species examined include various fish such as sea-grown rainbow trout (*Oncorhynchus mykiss*), yellowtail (*Seriola lalandi*), and dusky kob (*Argyrosomus japonicus*), along with molluscs like abalone (*Haliotis midae*), black mussel (*Choromytilus meridionalis*), Mediterranean mussel (*Mytilus galloprovincialis*), and Pacific oyster (*Crassostrea gigas*), and seaweeds *Ulva lacinulata* and *Gracilaria gracilis*. The presentation will explore the nutrient supply of various production scenarios, including the strategic utilization of by-products from some of these farmed species, to enhance the role of aquatic foods in meeting the recommended nutrient intakes for key nutrients in South Africa. This study seeks to provide insights into how aquatic foods can contribute to national food and nutrition security strategies.

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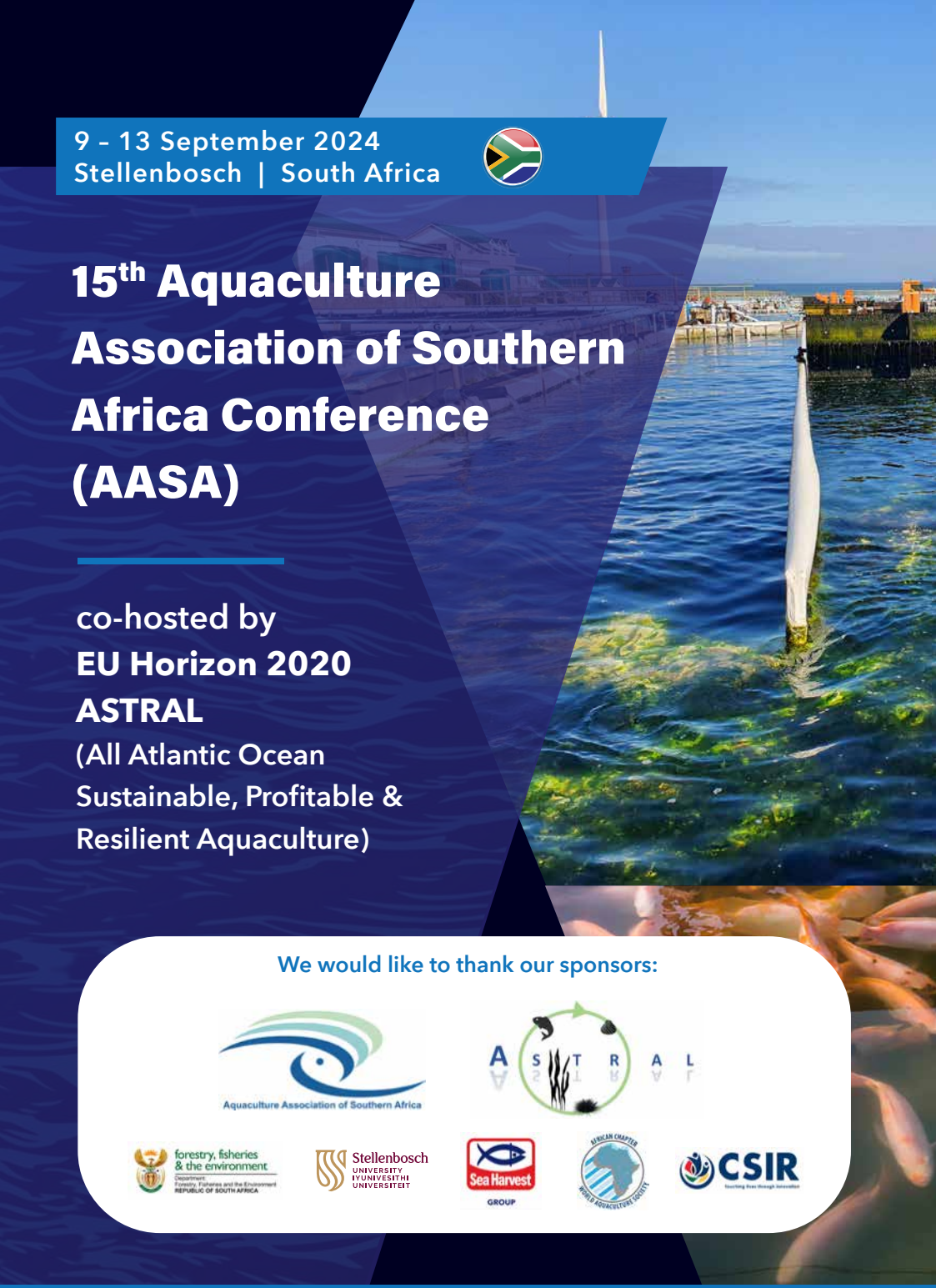

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