

Seaweed as an Immune Booster

CHAPTER 11

Harshita Singh

Department of Fisheries, R&A Centre for Phytopharma, **Centurion University of Technology and Management, Odisha**

E mail – 180804230015@cutm.ac.in

Abstract

Due to the rise in pesticide and antibiotic resistance, our crops and livestock are increasingly at risk. There is a rising demand for environmentally friendly solutions to prevent crop decreases. Components of seaweed extracts were recently found to boost plant immunity. One of them is the use of new seaweedderived molecules to restore the body's natural shield and its reaction to immune boosting strategies.

INTRODUCTION

Immunology is the study of the immune system and how it responds to infections that invade the body. The immune system is made up of molecules, cells, tissues, and organs that are involved in the host's protective mechanisms and are associated with immunity. The immune system to work successfully it must recognize a large number of microorganisms and molecules that it has never seen before, and it must decide how to respond to them. It should also differentiate between self and non self antigens such as viruses, bacteria, parasites and toxins. The body to defend itself against non self specific invading pathogen it has developed a resistance referred as immunity. Immunity have a memory for most invading pathogens invaded before, and for this invading pathogen they form memory cells that can last for decades.