

## INTISARI

Penelitian ini bertujuan untuk mengaji pengaruh ekstrak rumput laut dan mendapatkan konsentrasi terbaik ekstrak rumput laut terhadap pertumbuhan bibit garut dari tunas. Penelitian dilaksanakan di *Green House* dan Laboratorium Penelitian Fakultas Pertanian, Universitas Muhammadiyah Yogyakarta pada bulan April 2018 hingga Juli 2018.

Penelitian ini dilakukan dengan metode lapangan faktor tunggal yang disusun dalam Rancangan Acak Lengkap (RAL) yang terdiri dari 6 perlakuan, yaitu : (P0) Kontrol (tanpa perlakuan ekstrak rumput laut); (P1) Perendaman 1000 ppm ekstrak rumput laut; (P2) Perendaman 2000 ppm ekstrak rumput laut; (P3) Perendaman 3000 ppm ekstrak rumput laut; (P4) Perendaman 4000 ppm ekstrak rumput dan (P5) Perendaman 5000 ppm ekstrak rumput laut. Setiap perlakuan diulang 3 kal, dengan demikian diperoleh 18 unit percobaan. Setiap unit terdiri dari 7 tanaman, sehingga terdapat 126 polybag tanaman.

Hasil penelitian menunjukkan bahwa perendaman dengan berbagai macam konsentrasi ekstrak rumput laut nyata meningkatkan pertumbuhan bibit garut.

## **ABSTRACT**

*The experiment purposed to examine the effect to seaweed extract and get the best concentration of seaweed extract on the growth of arrowroot seedling from shoots. The research was conducted at Green House and Research Laboratory of agriculture faculty, Muhammadiyah University of Yogyakarta, at April 2018 until July 2018.*

*The research was carried out by field experimental method a single factor which was compiled in Completely Randomized Design (CRD) which consisted of 6 treatments i.e. : (P0) Control (without seaweed extract treatment); (P1) Immersion of 1000 ppm of seaweed extract; (P2) Immersion of 2000 ppm of seaweed extract; (P3) Immersion of 3000 ppm of seaweed extract; (P4) Soaking 4000 ppm of grass extract and (P5) immersion of 5000 ppm of seaweed extract. Each treatment was repeated 3 times, thus 18 experimental units were obtained. Each unit consists of 7 plants, so there are 126 plant polybags.*

*The results showed that soaking with various concentrations of the seaweed extract significantly increased the growth of arrowroot plant.*