ISBN: 978-602-097-239-8

The Optimizing Of Crop Bioactive Compounds By Management And Post-Harvest Handling Arrangements

Erma Prihastanti
Department Of Biology
Faculty Of Mathematics And Natural Sciences
Diponegoro University Indonesia
email: eprihast@yahoo.co.id

ABSTRACT

e objective of this paper is to study of the optimizing of crop bioactive compounds by management d post-harvest handling arrangements. Bioactive compounds of plants widely used in various fields life, as in the industrial, food, medicine. The ability of plants to produce maximaily bioactive mpounds closely related to the way of cultivation and post harvest handling these plants. selection of ecies or varieties of plants, habitats, soil, seasons and weather and how culture can lead to fferences such as taste, odor, chemical content and the amount of production generated. The principle the primary goals of post harvest handling is important to understand the characteristics of stharvest products as raw plant products that are still alive and still continue the functions of etabolism. An understanding of the nature and effect of product harvest handling practices are very portant to do the best compromise to maintain the optimum condition of the product.

ywords: crop cultivation, plant bioactive compounds, post harvest

troduction

External and internal factors such as variety, season, location, ripening, growing nditions, technological and domestic processes could affect the content of bioactive mpounds in food (Nobili et al., 2008). Internal factors is a trait inherited from the parent ant, such as taste, odor, chemical composition, and biomass production capability. Factor in vering things that are genetic. Types or varieties of plants also cause differences in nature, ch as taste, odor, chemical content, and the amount of production generated. Under the same ltivar and climate conditions, the type of soil management turned out of primary importance influencing the concentration of health-promoting compounds (Lombardi-Boccia et al., 04).

The influence of genetic factors on the nature of the medicinal plants can be utilized in effort to obtain a high content of active compounds with high biomass production as well. xternal factors that influence the nature, composition, appearance (morphology), as well as oduction of plant biomass is much influenced by cultivation factors, treatment, and the vironment, such as light, temperature, season, and nutrients are available. The use of ntrolled environments can overcome cultivation difficulties and could be a means to anipulate phenotypic variation in bioactive compounds and toxins. Conventional plant-eeding methods can improve both agronomic and medicinal traits, and molecular marker sisted selection will be used increasingly (Canter et al., 2005).

In addition to management in culture, which includes an understanding of crop harvest ming, manner and means of harvest is very important in addition to post-harvest handling. It