

Penambahan Sari Buah Duwet (*Syzygium cumini*) Terhadap Aktivitas Antioksidan Yoghurt (The addition of Duwet Juice (*Syzygium cumini*) against the Yoghurt Antioxidant Activity)

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ABSTRACT

Free radicals in the human body can cause oxidative damage and could be neutralized by antioxidants. Oxidative Stress caused by the imbalance between free radicals as reactive oxygen species (ROS) with antioxidant activity. This process causes the emergence of several degenerative diseases such as cancer, heart, diabetes mellitus. One of the prevention efforts can be done through the intake of antioxidants such as with the addition of duwet juice which have high antioxidant activity. The yoghurt duwet juice is expected to be functional food that is rich of antioxidant. This research aims to find out the effect of giving the duwet juice against the activity of antioxidant, anthocyanin level, and the acceptance of the yoghurt organoleptic. The design of the experiment that is used is a complete Random Design (RAL). Determination of formulation in this research is done with the addition of duwet juice from the weight of the yoghurt namely A1 = 0%, A2 = 5%, A3 = 10%, A4 = 15%, A5 = 20%, A6 = 25%, A7 = 30% and on each repeated treatment as much as 4 times. The results of the study showed that the antioxidant activity and the level of anthocyanin yoghurt duwet juice showed a different result evident between each treatment. Organoleptic results had a tangible impact of color, taste, flavors and texture to the yoghurt. The best treatment there were on the treatment A7 with the concentration of adding 30% duwet juice from the weight of the yoghurt. The yoghurt duwet juice can be called as a functional food, which merged yoghurt functional food with duwet functional food to produce a wider health effects (multifunction).

Key Words: duwet juice, yoghurt, and antioxidant activity