

<b>Project</b>	The antioxidant capacity of pomegranate peel tea.
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## Abstract

The objective of this research was studied an antioxidant capacity of tea produced from pomegranate peel. cv. Emerald. The operation processes of massage (15 and 25 minutes), fermentation (1 and 3 hours) and drying temperature (60 and 70 degree Celsius) were studied for antioxidant capacity (% inhibition) of tea and tea powder. The results showed that 2 levels of massage time, fermentation time and drying temperature were affected on the percentage of antioxidant capacities. The duration of the massage operation of 25 minutes, 3 hours of fermentation time, and 60 degrees Celsius of drying temperature, resulting in the highest percentage of antioxidant capacities of the tea sample. The color value of the tea measured by Munsell Book is 10YR7/14. The final moisture content of tea powder was 5.43% which the number showed within the criteria of the Standard of Community Products of Tea (less than 8%). The Water activity of tea sample was 0.345. For the sensory evaluation, consumers accept the physical characteristics of tea such as color, smell and clarity rather than taste. The microbial examination of tea using bacterial test kits showed the number which was not exceeded than the criteria. (less than  $10^4$  CFU/g)

**Keywords** Tea Pomegranate Free Radicals Antioxidants