World Academy of Science, Engineering and Technology
International Journal of Nutrition and Food Engineering
Vol:13, No:07, 2019

# Antioxidant Activities, Chemical Components, Physicochemical, and Sensory Characteristics of Kecombrang Tea (Etlingera elatior)

**Authors :** Rifda Naufalin, Nurul Latifasari, Siti Nuryanti, Muna Ridha Hanifah

**Abstract :** Kecombrang is a Zingiberaceae plant which has antioxidant properties. The high antioxidant content in kecombrang flowers has the potential to be processed as a functional beverage raw material so that it can be used as an ingredient in making herbal teas. The purpose of this study was to determine the chemical components, physicochemistry, antioxidant activity and sensory characteristics of kecombrang tea. The research methodology was carried out by using a completely randomized design with processing factors of kecombrang tea namely blanching and non-blanching, fermentation and non-fermentation, and the optimal time for drying kecombrang tea. The best treatment combination based on the effective index method is the treatment of the blanching process followed by drying at a temperature of 50°C until the 2% moisture content can produce kecombrang tea with a total phenol content of 5.95 mg Tannic Acid Equivalent (TAE) / gram db, total flavonoid 3%, pH 4.5, and antioxidant activity 82.95%, red color, distinctive aroma of tea, fresh taste, and preferred by panelists.

**Keywords :** kecombrang tea, blanching, fermentation, total phenol, and antioxidant activity
**Conference Title :** ICFSE 2019 : International Conference on Food Science and Engineering
**Conference Location :** Helsinki, Finland
**Conference Dates :** July 18-19, 2019