

## ABSTRAK

Dalam upaya meningkatkan produksi kopi di Indonesia, daerah Nawangan Pacitan menjadi salah satu alternatif daerah penghasil kopi yang dapat ditingkatkan produktivitasnya. Selain produktivitas, kualitasnya pun juga harus ditingkatkan salah satunya melalui proses *roasting*. Berdasarkan hal tersebut, maka penelitian mengenai pengaruh suhu dan waktu penyangraian ini dilakukan dengan tujuan mengetahui kandungan fisikokimia pada biji kopi arabika asal nawangan sehingga dapat mengetahui mutu kopi arabika nawangan. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan faktorial dua faktor yaitu faktor pertama adalah suhu penyangraian (*cut off temperature*) yang terdiri dari 3 taraf, yaitu 195°C, 205°C, dan 215°C dan faktor kedua adalah lama waktu penyangraian yang terdiri dari 5 menit, 10 menit, dan 15 menit. Hasil penelitian ini menunjukkan bahwa proses penyangraian pada biji kopi arabika mempengaruhi dimensi, *density*, warna, kadar air, dan juga kadar abu. Semakin tinggi suhu dan lama waktu penyangraian kadar air akan berkurang dan biji kopi semakin mengembang sehingga densitasnya menurun. Akan tetapi, proses penyangraian pada biji kopi tidak memengaruhi kadar kafein karena kafein cenderung tahan panas sehingga tidak ada perbedaan yang signifikan.

## ABSTRACT

Coffee is one of the most popular drinks in the world today. In an effort to increase coffee production in Indonesia, the Nawangan Pacitan area is one of the alternative coffee-producing areas that can be increased in productivity. The quality of the coffee beans produced must also be a major concern. Things that can improve the quality of coffee beans are by improving the flavor through the roasting process. Based on this, research on the effect of roasting temperature and time was conducted with the aim of knowing the physicochemical content of Arabica coffee beans from Nawangan so as to determine the quality of Arabica coffee from Nawangan.

This study used a completely randomized design (CRD) with a two-factor factorial referring to research by Abubakar (2021) on the sensory characteristics of gayo arabica coffee. The factors tested in this study were temperature and time. The first factor is the roasting temperature (cut off temperature) which consists of 3 levels, namely 195°C, 205°C, and 215°C and the second factor is the length of roasting time which consists of 5 minutes, 10 minutes, and 15 minutes.

The results of this study indicate that the roasting process of Arabica coffee beans affects the dimensions, density, color, water content, and ash content. The higher the temperature and the longer the roasting time the moisture content will decrease and the coffee beans will expand so that the density decreases. However, the roasting process of coffee beans does not affect caffeine levels as caffeine tends to be heat-resistant, so there is no significant difference.