Uji Kinerja Alat Penyulingan Minyak Atsiri Kulit jeruk Menggunakan Metode Uap dan Air (Performance Test of Orange Pell Essential Oil Distillation Equipment Using Steam and Water Methods)

Dr. Ir Budi Hariono, M.Si

Siti Nur Faizah
Study Program of Food Engineering Technology
Majoring of Agriculture Technology
Program Studi Teknologi Rekayasa Pangan
Jurusan Teknologi Pertanian

ABSTRACT

Essential oil is one of the commodities that has great potential in Indonesia. One type of essential oil that can be produced in Indonesia is orange peel oil. Orange peel has many benefits including for the perfume chemical industry, adding orange aroma to drinks and food, and in the health sector, namely as an antioxidant. There are several extraction techniques to obtain essential oils, namely water distillation, steam distillation and water-steam distillation. Distillation or refining is a method of separating chemicals based on the difference in speed or ease of evaporation (viscosity) of the material. In the distillation process, the mixture of substances is boiled so that it evaporates and this steam is then cooled back into liquid form. The purpose of this research is to determine the performance of the distillation equipment and the distillation process in extracting essential oils from orange peel using the steam and water methods. The results of the study showed the highest yield of orange peel essential oil, namely 0.57% on the third day with a distillation time of 5.45 hours, this is because the longer the distillation time, the greater the yield produced. Thus, the efficiency of the distillation process can be increased by setting the optimal distillation time.