

Preliminary study of ohmic heated hydro distillation for essential oil's plant extraction

ABSTRACT

Essential oils can be extracted by various extraction methods such as hydro distillation, steam distillation and solvent extraction. However, the application of ohmic heated hydro distillation has not been reported much elsewhere. In this study, ohmic heated hydro distillation of four types of plants; *Cymbopogon atratus* (Lemon grass), *Cymbopogon nardus* (Citronella grass), *Backhousia Citriodora* (Lemon myrtle) and *Syzygium aromaticum* (Clove) were studied in terms of yield and power consumption with electrical element heated hydro distillation. Generally, in most cases ohmic heated hydro distillation required less power and produce more essential oils yield for the same duration of extraction time. The results of the extraction process were presented.

Keyword: Ohmic heating; Hydro distillation; Essential oil