

Chemical constituents variations of essential oils from rhizomes of four Zingiberaceae species

ABSTRACT

The essential oils were extracted using the hydrodistillation method from four Zingiberaceae species. Zingiber officinale, Zingiber amaricans, Kaempferia galanga, and Boesenbergia pandurata were identified as E-citral (20.98%), zerumbone (40.70%), ethyl p-methoxycinnamate (58.47%) and camphor (57.97%), respectively. Kaempferia galanga and Zingiber amaricans were rich in sesquiterpenes whereas Boesenbergia pandurata and Zingiber officinale var. rubrum contained mostly monoterpenes.

Keyword: Essential oils; Hydrodistillation; Zingiber officinale; Zingiber amaricans; Kaempferia galanga; Boesenbergia pandurata; Zingiberaceae