
6-gingerol content of ginger (*Zingiber officinale* Roscoe) by different drying methods

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Résumé

Ginger (*Zingiber officinale* Roscoe) is one of the most widely used herbs that contains several interesting bioactive constituents and possesses health promoting properties. 6-gingerol is a major pungent ingredient of ginger. Two conditions of ginger rhizome (peeled and unpeeled skin of the rhizome) were used to monitor 6-gingerol content in different drying methods which are sun dry (SD), freeze dry (FD), hot air dry at 40 0C (HA40), hot air dry at 50 0C (HA50), hot air dry at 60 0C (HA60) and hot air dry at 70 0C (HA70). Contents of 6-gingerol from these dried samples were determined by HPLC. The result showed that unpeeled skin of fresh ginger rhizome had the highest 6-gingerol content (75.25 ± 2.03 mg/100 g fresh weight), higher than peeled skin of ginger rhizome (68.15 ± 1.43 mg/100 g fresh weight). When compared 6-gingerol content in peeled with unpeeled skin of ginger rhizome in different drying methods it was found that 6-gingerol content in freeze dried unpeeled skin ginger rhizome had the highest 6-gingerol content of 266.43 ± 1.18 mg/g dry weight. The different heat drying methods showed that HA50 had 221.82 ± 2.56 mg/g dry weight. The results indicated that freeze dry method is the optimum drying method for ginger to maintain the highest content of 6-gingerol.

Mots-Clés: 6, gingerol, Ginger, Drying method

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