FRUIT QUALITY AND ANTIBACTERIAL TEST OF WILD BITTER GOURD VARIETIES COLLECTED IN SOUTHERN EAST AREA OF VIETNAM

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Summary

Bitter gourd (*Momordica charantia* L.) is not only used as a common vegetable, but also that is used in traditional medicine to treat number of serious diseases in many countries. Studies on the wild bitter gourds showed that more bioactive components than bitter gourd. In Vietnam, the areas planting bitter gourd are growing recently. To improve yield and quality fruit of bitter gourd F1 varieties, the wild bitter gourd populations including 21 varieties/lines have been evaluated for quality fruit consisted of mineral elements and inhibitory activity against gram-negative bacteria, *Salmonella* sp. The mineral content in bitter gourd fruit varies among varieties/lines, in which potassium ranges from 1.77 to 3.45 (mg/kg), Calcium from 100 to 311 (mg/kg), magnesiun from 106 to 214, and zinc from 1.01 to 3.18 (mg/kg). On the inhibition test, all fruit extracts of biter gourd showed inhibition activity agaisnt *Salmonella* sp. after 24 hours and 48 hours on LBA medium incubated at 37^0C. Interestingly, the *Salmonella* sp was completely inhibited on medium containing extraction of 12 or 17 variety. These materials will be very useful for improving bitter gourd varieties in the future.

Keywords: *Wild bitter gourd, Salmonella sp.bacteria.*