

**The Use of Amprotab and Polyvinylpyrrolidone as  
Binding Agents in Lozenges of Dry Rhizome Temulawak Extract  
(*Curcuma xanthorrhiza* Roxb)**

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**ABSTRACT**

Dry rhizome temulawak extract (*Curcuma xanthorrhiza* Roxb) as lozenges has not been made before. In this study, the extract was formulated using Amprotab and Polyvinylpyrrolidone (PVP) in different concentrations. There were four formulas with different binding agent such as Formula I with PVP 3 %, Formula II with PVP 4%, Formula III with Amprotab 10% and Formula IV with Amprotab 15%.

The dry rhizome temulawak extracts contained 3.51% of water, 4.54% of essential oil and 0.59% of curcumin. Granule and tablet evaluation fulfilled the requirement of Aulton and Indonesia Pharmacopoeia IV. Hedonic test was performed by thirty volunteers that preferred Formula III 76.22% compared to the other three formulas. The result of hardness test showed that Formula IV has hardness which was significantly higher compared Formula I, II and III. However, Formula I, II and III is not significantly different. *The result showed that Amprotab at concentration of 10% can be used to replace PVP and was a good binding material for lozenges.*