

ABSTRAK: Permen pastiles (*pastiles candy*) merupakan produk kembang gula yang mengikutsertakan gelatin selain gom arab dan sirup glukosa yang lebih banyak sehingga berpengaruh pada tekstur permen yang lebih lunak dan berlapis tepung gula. Bahan baku pembuatan permen pastilles yaitu manitol, xilitol, stevia, gelatin, alginat, asam stearat, magnesium stearat, dan sari bunga kecombrang sebagai zat antioksidan. Penelitian ini menggunakan *Response Surface Methode* dimana akan ada beberapa formulasi yang dibuat dan satu formulasi terbaik menurut program *Design Expert 13®*. Data dianalisis menggunakan ANOVA. Mutu permen pastiles ditentukan berdasarkan mutu fisik seperti total padatan terlarut, mutu kimia seperti kadar air, kadar abu dan antioksidan, serta mutu organoleptik berdasarkan warna, aroma, rasa dan tekstur dengan metode hedonik dan mutu hedonik serta penerimaan umum. Formulasi terbaik pada permen pastiles akan dilakukan uji penunjang berupa proksimat (kadar air, kadar abu, protein dan lemak). Hasil formulasi terbaik berdasarkan optimasi program *Design Expert 13®* menghasilkan kadar air 2,32%, kadar abu 1,48%, total padatan terlarut 26^oB, antioksidan 65,1% dengan nilai IC₅₀ 100,5 ppm, hedonik warna agak suka, aroma suka, rasa suka dan tekstur suka dan penerimaan umum suka. Permen pastiles formulasi optimal memiliki kadar protein 4,80% dan kadar lemak 0,29%.

Kata kunci: Permen Pastiles, Bunga Kecombrang, Alginat, RSM, Diabetes

ABSTRACT: *Pastilles candy is a confectionery product that includes gelatin in addition to gum arabic and more glucose syrup so that it affects the texture of the candy that is softer and coated with sugar flour. The raw materials for making pastilles candy are mannitol, xylitol, stevia, gelatin, alginate, stearic acid, magnesium stearate, and kecombrang flower juice as antioxidants. This research uses the Response Surface Method where there will be several formulations made and one of the best formulations according to the Design Expert 13® program. The data was analyzed using ANOVA. The quality of pastiles candy was determined based on physic qualities such as total desolved solids, chemical qualities such as moisture content, ash content and antioxidants, and organoleptic quality based on color, aroma, taste and texture by hedonic method and hedonic quality and general acceptance. The best formulation in pastiles candy will be carried out supporting tests in the form of proximate (water content, ash content, protein, fat and carbohydrates). The best formulation results based on the optimization of the Design Expert 13® program resulted in a long dissolution of 4 minutes, moisture content 2,32%, ash content 1,48%, total desolved solids 26^oB, antioxidant 65.1% with an IC₅₀ value of 100.5 ppm, hedonic color somewhat like, aroma like, liking and hardness like and general acceptance of like. Candy pastiles optimal formulation has protein content 4,80% and fat content 0,29%.*

Keywords: *Candy Pastiles, Combrang Flowers, Alginate, RSM, Diabetes.*