

ABSTRACT

The purpose of this research to determine optimal formulation on strawberry pulp effervescent with binder material (gelatine) and crushing material (citrit acid, tartat acid, sodium bicarbonate) and to know the characteristics of pulp strawberry effervescent.

This research is separated by two steps: preminary research to determine the proper filler material in effervescent tablet which is chosen by vitamin C and water content analysis and then main research to determine the best optimal formulation on strawberry pulp effervescent from binder material (gelatine) and crushing material (citrit acid, tartat acid, sodium bicarbonate) use design expert program with d-ptimal methode.

Optimal formulation that has been predicted by program is 1.308% gelatine; 16% citrit acid; 15.03% tartat acid; 33,662% sodium bicarbonate and constant variable percentage is 10% strawberry pulp; 3% stevia sweetener; 20,7% filler material whose analysis result with solubility time 193,009 second; hardness 4,5001 kgf; pH 5,58648; vitamin C level 0.113893 %; colour score 4,06247 ; aroma score 3,69741; taste score 3,62173.

Based on optimal formulation which is offered by program and compared with laboratory analysis, so that could be proved from desirability value with 1 value that exclamate the different score between analysis result by program and analysis laboratory hasn't significant score. But the others analysis have some different, that means it should be tested the accuracy with statistic test.