

ABSTRACT**PENGGUNAAN PEREAKSI FENOL-ASAM SULFAT
PADA PENENTUAN KADAR KARBOHIDRAT
DALAM SERBUK GUAR GUM DENGAN METODE
SPEKTROFOTOMETRI VISIBEL**

Guar (*Cyamopsis tetragonoloba*) has great benefits and is widely used in various industries, including the food, textile and medical industries. Guar gum powder contains carbohydrates, namely galactomannan which is divided into D-galactose and D-manose. In determining the levels of galactomannan, phenol sulfuric acid reagent was used with the Visible Spectrophotometric method. The research was conducted in a literature review by collecting a number of literature through a database using certain keywords. After that, screening was carried out using inclusion, exclusion parameters and the data used. Obtained 10 literature in accordance with the parameters used. The most optimal condition used is to use phenol-sulfuric acid reagent as hydrolyzing compound and using a reagent 1.0 ml of phenol 5% and 5.0 ml of concentrated H₂SO₄. The use of phenol-sulfuric reagents with Visible Spectrophotometry method gives the results of carbohydrate content (galactomannan) in guar gum of 98.20%

Keywords : galactomannan, guar gum, phenol-sulfuric acid,
Spectrophotometry Visible