

Carbohydrate Measurement

Reissig 1955. J. Biol. Chem. 217: 959.

Samples to test:

Alkali soluble glucan

Zymolyase insoluble glucan

Alkali-insoluble β 1-6 glucan.

Total Alkali-insoluble glucan--gives β 1-3 glucan percent

1. To 100 ul sample and 100ul standard, add 2.5 ul of 80% phenol.
2. Add 250 ul of concentrated sulfuric acid. Allow to stand 10'.
3. Shake tubes and put in water bath between 25 and 30°C for twenty minutes.
4. Read OD at 490 wavelength.

Microtiter plate adjustment:

Use 50 ul sample and 50ul glucose standard (0, 0.0375, 0.075, 0.15, and 0.3 mg/ml)

Add 1.25 ul of 80% phenol

Add 1.25 ml conc sulfuric acid

Incubate 30 min at 50 RPM at 30C.