

Beta-Glucans and Beta-Glucanases

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CONCLUSIONS

A viscometric procedure for determining endo- β -glucanase activity in malt, using lichenin (Sigma L-8378) as the substrate, was planned, but shortly after testing began, Sigma Chemical changed its lichenin preparation to a practical grade (L-6133) that is not a suitable substrate for the analysis.

RECOMMENDATIONS

Two alternative substrates, available from Biocon and Novo,

should be evaluated. Minor procedural changes may be appropriate to accommodate these substrates.

DISCUSSION

The planned collaborative work had a Youden Block design with two sample pairs consisting of a typical commercial brewer's malt and a very highly dried malt with low β -glucanase activity. The lichenin (Sigma L-8378) to be used for the test was a white light-weight powder giving relative viscosities of 1.70 for a 0.3% solution. However, Sigma discontinued this preparation, replacing it with a brownish, dense, granular practical grade lichenin (L-6133) that produced relative viscosities of 1.50 for a 0.3% solution and that was not readily available.