	Experiment title: **XyloglucanEndotransglycosylase.** *BAG: Uppsala (II)*	**Experiment number**: LS-2187
Beamline: ID14:1	**Date of experiment**: from: 020713 to: 020714	**Date of report**: 23 Aug 2002
Shifts: 1	**Local contact(s)**:	*Received at ESRF:*

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Report:

Xyloglucan is an abundant polysaccharide in dicot cell walls where it can form crosslinks that restrains cell expansion and allows the generation of turgor pressure. The enzyme XyloglucanEndotransglycosylase, XET, is belived to play a key role in wall expansion and growth. Catalyzing both endolytic cleavage of xyloglucan *and* ligation of the newly generated end to another xyloglucan chain, it enables expansion without undermining cell structure.

The structure of XET had previously been solved by SIRAS using a three site Au-derivative from data in part collected at ESRF ID14:4 to a resolution of 2.1Å. At ID14:1 a number of putative ligand-complex datasets of XET soaked with xylogucan oligosaccharide were collected. Using this data a XET-XGO structure was solved and has been refined to 1.9Å, this might provide further insight to the mechanism of transglycosylation, xyloglucan binding cleavage and ligation.