

John Innes Centre

JIC WGIN Nov 2005

- Part 2 -

**Update on the
Avalon x Cadenza mapping**

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Update on the Avalon x Cadenza mapping

Completing the SSR mapping on
all 204 lines

Adding the DArT® data

Updating the maps



AXC population in mini-plots

June 2005

Completing the SSR mapping on all 204 lines

Avalon x Cadenza Doubled haploid population has been divided into 4 sets:

- 1st set of 51 (the 1st lines to produce seeds in sufficient quantity)
- 2nd set of 153 (the 2nd lines to produce seeds in sufficient quantity)
- 3rd set of 204 (the full set)
- 4th set of 92 (mapped with SSRs by collaborators)

The aims are

- To integrate all the data from each set into one dataset
- To continue the mapping on the full set of 204 lines
- To complete the gaps to produce a high density map

Results



	Number of markers mapped on 204 lines	Number of polymorphic markers	Number of markers tested
May 2005	52	52	437
November 2005	100 + 256 Triticarte data	356	500
Expected December 2005	150 + 256 Triticarte data	406	500

AXC lines, June 2005

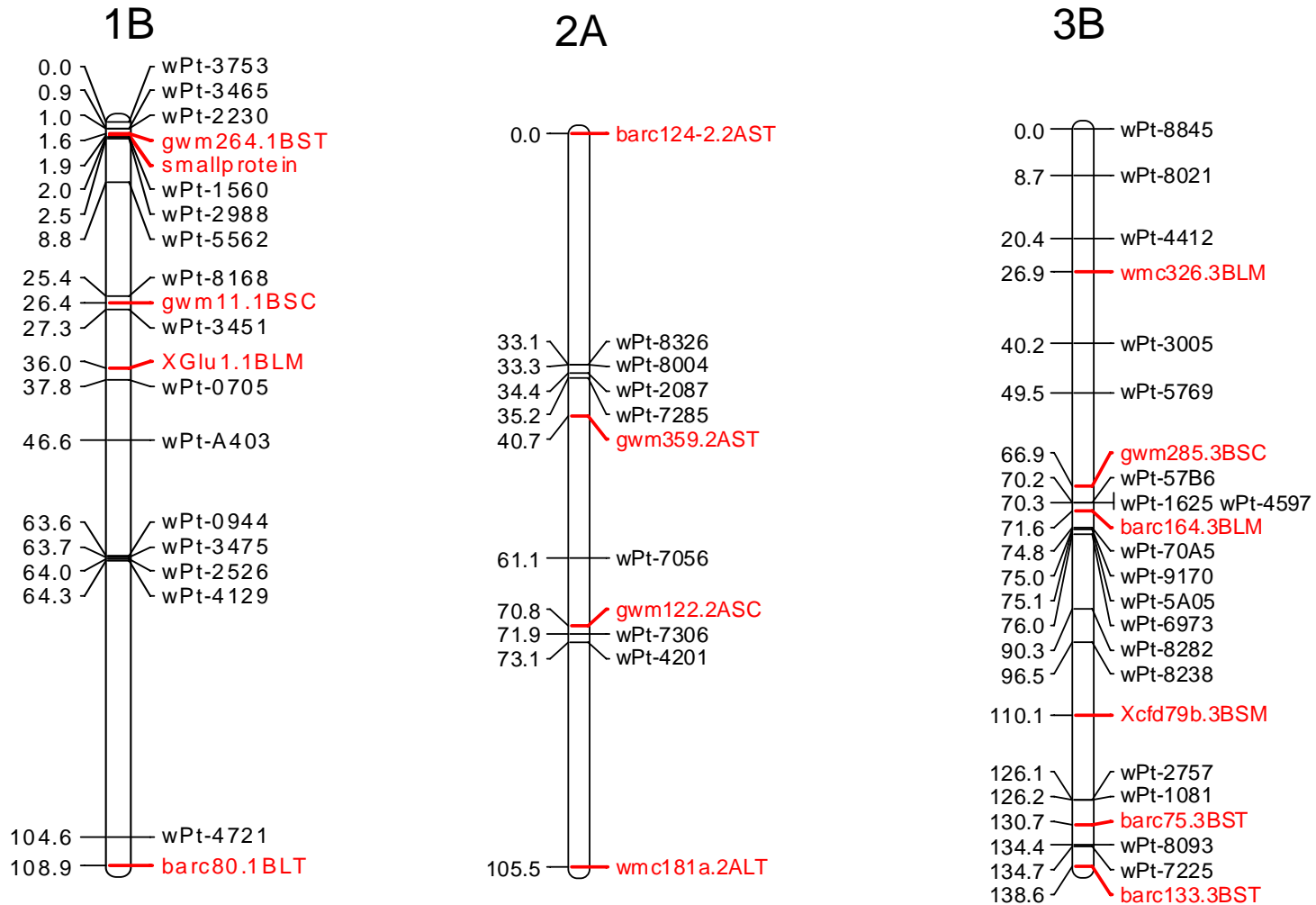
DArT Results

Number of lines	Number of Polymorphic Markers of High Quality	Additional Candidate Polymorphic Markers of Lower Quality	Total number of polymorphic markers
204	217	39	256

- Amongst the 204 lines, 40 lines have been repeated to confirm the data analysis.
- The results are being processed
- The final linkage groups are expected to be confirmed by December 2005.

DarT Results

Chromosomes are very well represented with linkage groups covering around 100cM. These Mapchart maps show that the Triticarte data (wPt in black) complement the SSR (in red) work efficiently.



Future tasks

- Processing all final data from Triticarte and SSR with Joinmap (406 polymorphisms on 204 lines) by December 2005
- Completing the map with new Genoplante SSR markers
- Threshing the AXC specimen tillers
- Preparing vernalization tests