Macroarray analysis of cold tolerance in alfalfa.

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In Northern country, cold tolerance is one of the major limitation to crop yield. To better understand the molecular basis of the cold acclimation process and the freezing tolerance of this legume species, we undertook a functional genomic project on alfalfa (*Medicago sativa*)

Using a nylon-membrane based array (macro-array), we have investigated the expression of broadly 10 000 ESTs during various phases of cold acclimation. Many different types of genes are either up-regulated or down-regulated at low temperatrure in alfalfa which include many new and unknown genes never described in the litterature. Results will be discussed in the poster.