

# Transcriptional profiling of maize genes in response to a growth-promoting agropolymer

## OBJECTIFS

Over the last few years, experimentations with maize grains coated with the guar gum-derivatives, in particular PolAB, have recurrently demonstrated improved growth in the field (data communicated by Solvay). On the contrary, the supply of polymers in laboratory conditions, even when attempting to mimic seed coating, often resulted in growth inhibition. A major drawback of the two previously funded projects was therefore to work with plant samples for which improved growth by the polymer treatments had not been satisfactorily achieved. The situation has recently changed since a positive effect of PolAB treatment, namely an increase of root growth, is now routinely observed with maize in the germination laboratory of Solvay (Clara Vernay, personal communication). We therefore propose to resume the transcriptomic study of polymer-treated plants using plant material obtained following Solvay's optimal growth conditions.

**Responsable :**

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