Supplementary 2

Protocol for maize seeds germination.

- 1. We selected 20 maize seeds per line for each experiment that were sterilized by placing them first in an Erlenmeyer flask with a capacity of 100 mL.
- 2. The seeds are covered with distilled water, washed and shaken to remove impurities and the liquid is discarded three times.
- Twenty-five mL of 15% sodium hypochlorite (NaClO) are added for 4 min, and approximately every min the flask is gently shaken, and then the solution is dispensed.
- 4. Repeat step 2.
- 5. Pour a solution of 0.17% (v/v) BANROT® fungicide to cover the seeds and keep them submerged for a period of 12 min without stirring. Afterwards, disposed the solution in a special container due to its toxicity.
- The sterilized seeds are placed at 3 cm of each other in a sterilized metal tray containing three layers of absorbent paper moistened with 200 mL of distilled water.
- 7. The tray is covered with aluminum foil, which is labeled with the direction of the root growth, the number of the DTMA hybrid and date.
- 8. The seeds are imbibed for three days in the dark in an inclined position and at a temperature of 26 +/- 2°C.
- 9. At the end of the process the germination percentage is calculated.