

TRANSGENIC FIELD RELEASE PROTOCOL: MAIZE

Labeling and Movement of Transgenic Seed

Note: Follow separate directions for movement of transgenic seed via mail.

Place transgenic maize seed in planting envelopes. Clearly label envelopes including line designation and transgenic stamp. For transport, place envelopes with transgenic seed into covered, labeled container. Seal container shut. Transport seed to approved location on foot or via vehicle.

Planting Transgenic Seed

Prepare envelopes of transgenic seed to be planted as described above. Also prepare seed envelopes for nontransgenic buffer rows of maize. Plant seed into approved, isolated field (at least 660 ft. away from nearest sexually receptive maize field that will be outside of your control) via standard planting protocols. Be very careful not to spill or lose seed during the planting process because this could result in an unintentional release into the environment! Plant 6 to 10 nontransgenic, maize buffer rows around the transgenic plots. Place clearly labeled plot stakes at the front of each plot.

Control of Pollen Flow

Monitor the field regularly (eg. weekly) during maize growth, and more frequently (daily) as transgenic plants approach boot stage and anthesis. Detassel transgenic maize plants, or bag all transgenic tassels, **prior** to pollen shed. Cover all ear shoots prior to silk emergence (in cases where all open pollinated ears will not be harvested and all seed devitalized following harvest). When making controlled crosses, avoid unintended dispersal of pollen. Clearly label crossed ear including lines crossed and transgenic designation.

Seed Harvest

Harvest and clearly label all ears from within the transgenic maize field, including ears from the buffer rows. Thoroughly check ground for any dropped ears. Devitalize open pollinated ears via autoclaving. Transport labeled, transgenic maize ears in closed container to seed processing facility.

Prevention/Elimination of Volunteer Transgenic Plants

Removal of all ears from plants in the field trial at harvest should prevent accidental release of seed and growth of transgenic volunteer plants. As an additional precaution against accidental release, an alternative crop (usually soybean) should be planted the following growing season in the field where the transgenic maize trial was located. Monitor the field during the growing season for growth of volunteer maize plants. Remove and devitalize any volunteer maize plants prior to pollen shed. Spraying of soybean field with grass herbicides active on maize is recommended as an additional means to prevent growth of volunteer maize plants.

Seed Storage

Clean shelling area of all debris and seed. Remove dried, transgenic maize seed from cobs, being careful not to spill or lose seed. Place seed in clearly labeled envelopes marked with transgenic stamp. Check floor and shelling area for any stray seed. Devitalize stray seed prior to disposal. Store groups of transgenic seed envelopes in marked, closed container. Place the container in a lockable cabinet.