

Speaking Biotech

There are several terms used in the seed industry, which identify Trait-Events. It is helpful if all those involved understand the differences in the terms. Please encourage your staff to use the "**Trait - Event**" format when requesting tests and referencing hybrid traits to assure the correct tests are conducted.

- ❖ **Trait** - a characteristic of an organism, which manifests itself in the phenotype (physically). In the use of a trait, it may be developed through a transgene (a package of genetic material (DNA) that is inserted into the genome of a cell via gene splicing technique or through other breeding methods. The same trait may be produced by different events and may need to be tested in a different manner.
- ❖ **Event** - each instance of a genetically engineered organism. This can be thought of as similar to a Latin name for plant species.
- ❖ **Brand** - a trademark that is used to market a product, such as YieldGard[®], VT[®], Herculex[®], Agrisure[®], etc.

Below is a table of several corn biotechnology traits events along with a description of the brand, trait description, and protein expressed.

| <u>Trait - Event</u> | <u>Brand, Description and protein expressed</u> |
|----------------------|---|
| CB - Bt11 | Agrisure [™] Corn Borer, marketed as YieldGard [®] , cry1Ab/Ac |
| CB - Mon810 | YieldGard [®] Corn Borer, cry1Ab/Ac |
| CB -TC1507 | Herculex [®] (HX) Corn Borer, cry1f |
| RW - Mon863 | YieldGard [®] Corn Rootworm, cry3Bb1 |
| RW- Mon 88017 | YieldGard [®] VT, RW trait portion, inbred denotation is CCR, cry3Bb1 |
| RW- DAS 59122-7 | Herculex [®] (HX) Corn Rootworm, cry34Ab1/cry35Ab1 |
| RW – MIR604 | Agrisure [™] Rootworm, mcry3A |
| GT - NK603 | RR trait for corn, Glyphosate tolerance, CP4EPSPS |
| GT- Mon 88017 | RR trait portion of YieldGard [®] VT, inbred denotation is CCR, Glyphosate tolerance, CP4EPSPS |
| GT - GA21 | Agrisure [™] GT, Glyphosate tolerance (GT), EPSPS |
| LL - T25 | Liberty Link (LL) trait for corn, Glufosinate tolerance, pat |
| LL – DAS59122-7 | LL trait portion of HX RW, Glufosinate tolerance, pat |
| LL-TC1507 | LL trait portion of HX CB, Glufosinate tolerance, pat |
| LL-Bt11 | LL trait portion of Agrisure CB, Glufosinate tolerance, pat |

Definitions from Nill, Kimball R. 1998. Glossary of Biotechnology Terms, Technomic Publishing Company.

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