toxins

MDPI

*Article*

# Could the Presence of Thrips AFFECT the Yield Potential of Genetically Modified and Conventional Maize?

**Ľudovít Cagáň, Peter Bokor and Oxana Skoková Habuštová**

toxins

MDPI

**Table S1.** Number of thrips in transparent sticky traps installed in maize field experiment during experimental seasons **2013-2015**. Locality: Borovce, Slovakia. Sum from 10 repetitions. Each repetition is the sum of thrips from one transparent sticky trap that were collected after seven days of their installation. Non-Bt- isoline (DKC 3871), Bt - maize (DKC 3872 YG).

| **Date of collection** | *Limothrips denticornis* | | *Limothrips cerealium* | | *Haplothrips aculeatus* | | *Frankliniella schultzei* | | *Frankliniella occidentalis* | | *Thrips tabaci* | | *Aeolothrips fasciatus* | | *Frankliniella tenuicornis* | | *Chirothrips spp.* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Non-Bt** | **Bt** | **Non-Bt** | **Bt** | **Non-Bt** | **Bt** | **Non-Bt** | **Bt** | **Non-Bt** | **Bt** | **Non-Bt** | **Bt** | **Non-Bt** | **Bt** | **Non-Bt** | **Bt** | **Non-Bt** | **Bt** |
| **2013** | | | | | | | | | | | | | | | | | | |
| June 17 | 1 | 0 | 10 | 14 | 1 | 1 | 7 | 2 | 1 | 1 | 0 | 1 | 0 | 0 | 14 | 19 | 1 | 0 |
| July 1 | 0 | 2 | 4 | 3 | 0 | 0 | 6 | 1 | 1 | 2 | 0 | 0 | 21 | 34 | 8 | 6 | 0 | 0 |
| July 15 | 29 | 21 | 50 | 56 | 293 | 324 | 41 | 33 | 4 | 11 | 1 | 1 | 83 | 55 | 47 | 44 | 2 | 3 |
| July 29 | 2 | 3 | 6 | 6 | 102 | 99 | 5 | 2 | 23 | 18 | 0 | 0 | 48 | 42 | 13 | 6 | 26 | 21 |
| August 12 | 0 | 0 | 0 | 1 | 0 | 13 | 4 | 0 | 3 | 2 | 0 | 0 | 9 | 29 | 6 | 9 | 3 | 3 |
| August 26 | 0 | 0 | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| September 09 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| September 23 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| October 07 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **2014** | | | | | | | | | | | | | | | | | | |
| June 10 | 0 | 0 | 21 | 47 | 0 | 0 | 11 | 31 | 0 | 0 | 1 | 1 | 0 | 0 | 5 | 6 | 0 | 0 |
| June 24 | 1 | 0 | 20 | 17 | 2 | 1 | 8 | 4 | 3 | 0 | 1 | 1 | 6 | 2 | 9 | 4 | 0 | 1 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| July 08 | 1 | 0 | 40 | 37 | 38 | 20 | 10 | 6 | 6 | 0 | 1 | 1 | 7 | 2 | 9 | 2 | 1 | 0 |
| July 22 | 2 | 0 | 4 | 3 | 9 | 10 | 0 | 4 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 |
| August 05 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| August 19 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| September 03 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| September 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| October 01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **2015** | | | | | | | | | | | | | | | | | | |
| June 18 | 1 | 1 | 16 | 16 | 0 | 1 | 6 | 8 | 2 | 2 | 1 | 1 | 2 | 3 | 6 | 8 | 0 | 0 |
| July 01 | 2 | 0 | 89 | 113 | 4 | 5 | 40 | 126 | 6 | 3 | 7 | 10 | 10 | 24 | 14 | 25 | 0 | 0 |
| July 16 | 3 | 0 | 123 | 75 | 11 | 3 | 3 | 0 | 25 | 10 | 2 | 0 | 0 | 0 | 33 | 20 | 0 | 0 |
| July 30 | 0 | 0 | 0 | 1 | 33 | 8 | 1 | 0 | 30 | 19 | 0 | 0 | 36 | 24 | 6 | 8 | 0 | 0 |
| August 12 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 50 | 21 | 0 | 0 | 1 | 1 | 7 | 4 | 0 | 0 |
| August 27 | 0 | 0 | 0 | 0 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 |
| September 01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| September 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |

toxins

MDPI

**Table S2.** Climatic data among climatic conditions during the collection of thrips in the experimental seasons **2013-2015**. T (+7) = average daily temperature during seven days of trap installation. T (-7+7) = average daily temperature during seven days before trap installation and during the time of trap installation. R (+7) = sum of precipitation during seven days of trap installation, R (-7+7) – the sum of precipitation during seven days before trap installation and during the time of trap installation. R (-30+7) sum of precipitation during 28 days before trap installation and during the time of trap installation. WS (+7) hourly means of wind speed ($ms^{-1}$) and WG (+7) wind gusts ($ms^{-1}$) during seven days of trap installation.

| Year | Date of trap collection | T (+7) | T (-7+7) | R (+7) | R (-7+7) | R (-30+ 7) | WS (+7) | WG (+7) |
|---|---|---|---|---|---|---|---|---|
| 2013 | June 17 | 19.725 | 18.09333 | 30.3 | 36.1 | 94.7 | 5.5714 | 9.5714 |
| 2013 | July 01 | 14.5125 | 19.49333 | 15.8 | 15.8 | 103.0 | 6.5714 | 11.7143 |
| 2013 | July 15 | 19.75 | 20.35333 | 3.6 | 5.4 | 51.5 | 5.7143 | 9.4286 |
| 2013 | July 29 | 25.0875 | 23.21333 | 0.1 | 0.1 | 21.3 | 3.4286 | 6.5714 |
| 2013 | August 12 | 24.6625 | 24.96667 | 10.9 | 18.4 | 22.1 | 5.0000 | 9.2857 |
| 2013 | August 26 | 18.55 | 18.96667 | 14.5 | 20.1 | 35.0 | 5.7143 | 9.8571 |
| 2013 | September 09 | 16.7125 | 16.80667 | 8.7 | 48.5 | 75.1 | 5.1429 | 8.8571 |
| 2013 | September 23 | 12.675 | 13.58667 | 29.2 | 56.0 | 111.7 | 6.5714 | 10.2857 |
| 2013 | October 07 | 8.75 | 10.4 | 0.0 | 0.1 | 56.3 | 5.8571 | 9.1429 |
| 2014 | June 10 | 19.4125 | 16.96 | 0.3 | 15.5 | 66.5 | 3.1429 | 6.2857 |
| 2014 | June 24 | 17.5 | 18.58667 | 0.0 | 0.7 | 21.5 | 4.8571 | 9.8571 |
| 2014 | July 08 | 21.125 | 19.72 | 19.2 | 51.3 | 52.3 | 4.4286 | 8.7143 |
| 2014 | July 22 | 23.6375 | 329.3 | 5.6 | 14.6 | 58.3 | 5.1429 | 11.2857 |
| 2014 | August 05 | 22.2 | 21.76 | 41.6 | 51.5 | 74.7 | 5.2857 | 9.7143 |
| 2014 | August 19 | 17.5625 | 19.8 | 11.3 | 15.0 | 69.1 | 6.1429 | 10.0000 |
| 2014 | September 03 | 16.0375 | 15.96875 | 14.6 | 26.7 | 83.2 | 4.8571 | 7.5714 |
| 2014 | September 16 | 16.95 | 18.02857 | 118.3 | 118.4 | 156.3 | 4.7143 | 8.4286 |
| 2014 | October 01 | 13.5625 | 14.65625 | 14.9 | 21.3 | 154.3 | 4.2857 | 8.0000 |
| 2015 | June 18 | 20.1625 | 20.36667 | 1.1 | 1.1 | 47.3 | 5.4286 | 10.4286 |
| 2015 | July 01 | 18.3625 | 16.62 | 0 | 15.7 | 37.5 | 5.2857 | 9.8571 |
| 2015 | July 16 | 19.9875 | 2.3 | 0.4 | 9.2 | 24.9 | 5.1429 | 11.2857 |
| 2015 | July 30 | 21.475 | 24.03333 | 12.7 | 12.7 | 21.9 | 5.8571 | 10.4286 |
| | | 27.5125 | 24.74286 | 0.2 | 3.7 | 16.8 | 3.5714 | 9.5714 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2015 | August 12 | | | | | | | |
| 2015 | August 27 | 19.0625 | 20.89333 | 4.4 | 131.0 | 147.4 | 5.0000 | 9.8571 |
| 2015 | September 10 | 15.5125 | 19.38667 | 2.1 | 2.5 | 133.7 | 6.1429 | 10.1429 |
| 2015 | September 24 | 17.175 | 17.84667 | 0.2 | 10.9 | 37.8 | 6.8571 | 11.5714 |