# Effect on maize (*Zea mays*) cultivars

**Crop:** Maize
**Stress 1:** Three plant density treatments - 37,037, 44,444 and 55,555 plants/ha
**Stress 2:** *Exserohilum turcicum*
**Stage of the plant**: All growth stages

**Interaction between host density and fungus**

**Table shows the effect of different host densities on the northern leaf blight of *Zea mays* cv EV8429-SR and KWCA.**

| **Plants** | **Treatments** | | **Plants response to combined stress** | |
|---|---|---|---|---|
| | | | **Type A parameter*** | **Type B parameter*** |
| | **Host density** (plants/ha) | **Fungus** | **Yield(kg/ha)**** | **% of leaf blighted**** |
| EV8429-SR | 37037 | *E. turcicum* | 6586 | 11.5 |
| | 44444 | *E. turcicum* | 7585 | 13.6 |
| | 55555 | *E. turcicum* | 8375 | 18.3 |
| KWCA | 37037 | *E. turcicum* | 6416 | 6.8 |
| | 44444 | *E. turcicum* | 6746 | 6.2 |
| | 55555 | *E. turcicum* | 8105 | 7.8 |

**For raw data** – Click here (.xlsx file)

**Reference-**

Adipala E, Takan JP and Ogenga-Latigo MW. Effect of planting density of maize on the progress and spread of northern leaf blight from *Exserohilum turcicum* infested residue source. European Journal of Plant Pathology 1995;101, 25-33.

***Note:***

*'*' - For more information on parameters classification, please refer to 'methodology' tab.*

*'**' Values presented as they were in the source articles without subjecting them to the calculation.*

**The inference from the study:** Adipala et al., 1995 found that host density did not significantly affect the disease incidence and progress, but significantly influenced the grain yield of the two cultivars. The disease incidence decreased with an increase in plant density, though non significantly for both the moderately resistant (KWCA) and susceptible (EV8429-SR) cultivar.

*Host density does not significantly affect the incidence of northern leaf blight in maize*