The Toothpick Spore Powder

- Very fine powder
- High spore concentration
- 3 x 10^7 cfu/g
- Very vigorous spores
- Spores germinate within one day
- Sufficient shelf life

Very vigorous Spores

Fusarium oxysporum colony after 24 hours

Fusarium oxysporum growing out of a maize grain

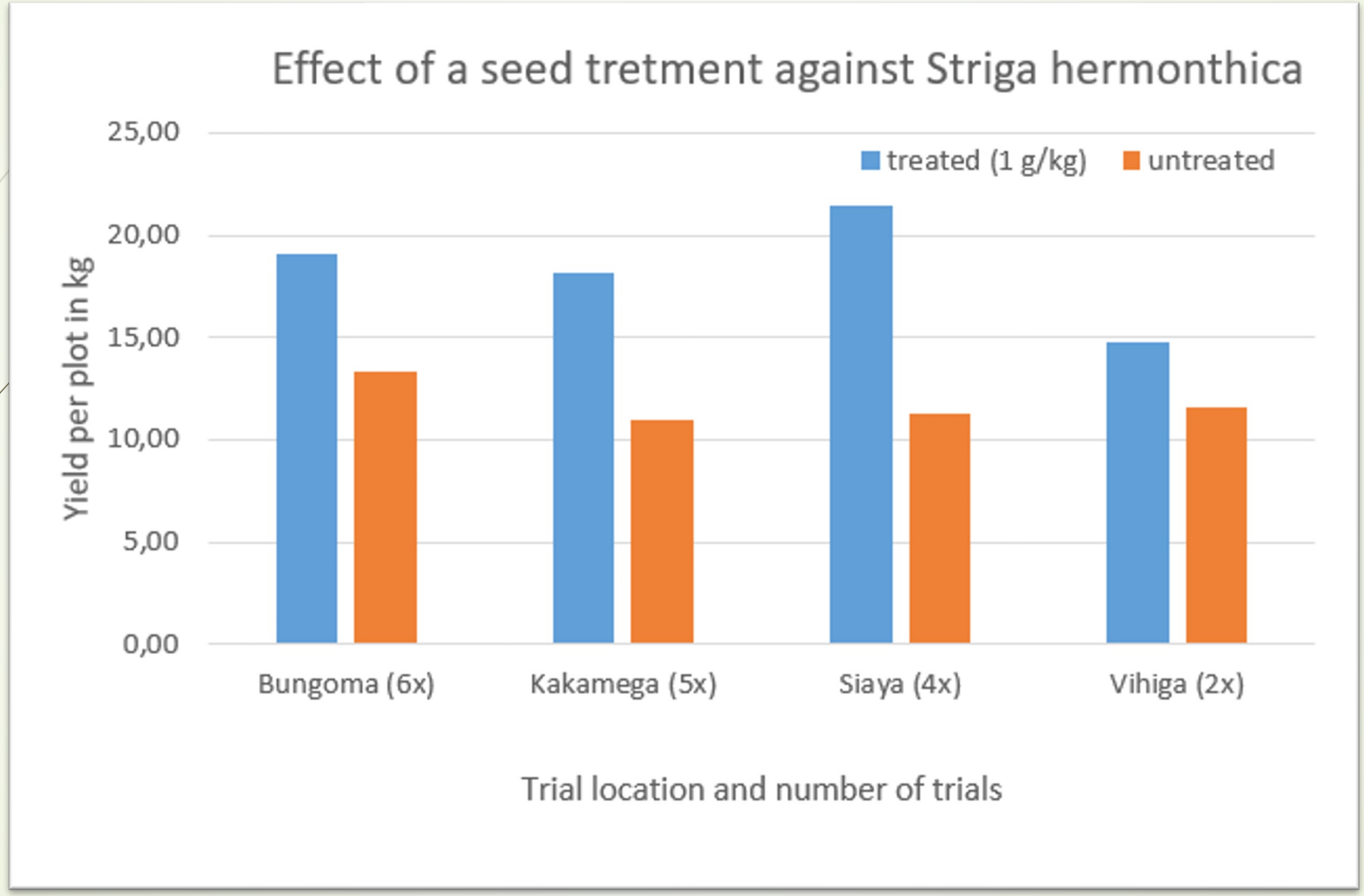
So far found shelf-life

Date	Spore viability in cfu/g dependant on different storage temperatures		
	+25 °C	+7 °C	-10 °C
18/02/2021 (start)	4.81×10^7	4.81×10^7	4.81×10^7
21/05/2021 (3 months)	0.83×10^7	4.35×10^7	4.83×10^7
17/08/2021 (6 months)	2.33×10^4	2.97×10^7	4.45×10^7
23/11/2021 (9 months)	0	1.91×10^7	3.21×10^7

First trial results using a pilot batch

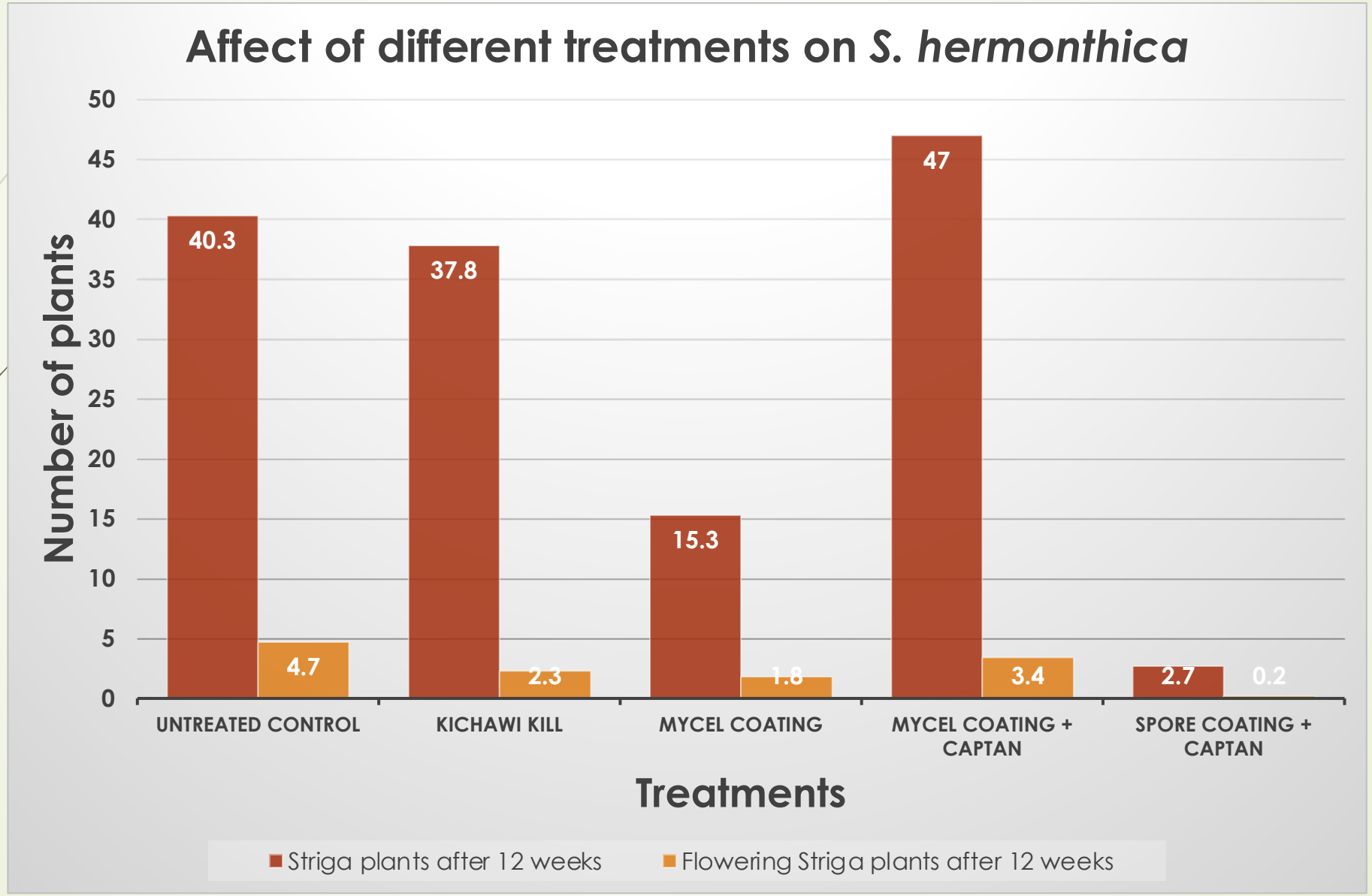
- **Trial was carried out in 4 counties**
  - Bungoma (6 farmers)
  - Kakamega (5 farmers)
  - Siaya (4 farmers)
  - Vihiga (2 farmers)
- **Each farmer set a treated and an untreated plot (10 x 10 m)**
- **The seed was treated with 1g/kg spore powder**
- **DUMA 43 maize seed variety was used on all plots**
- **As a result the yield per plot in kg was evaluated**

First trial results using a pilot batch

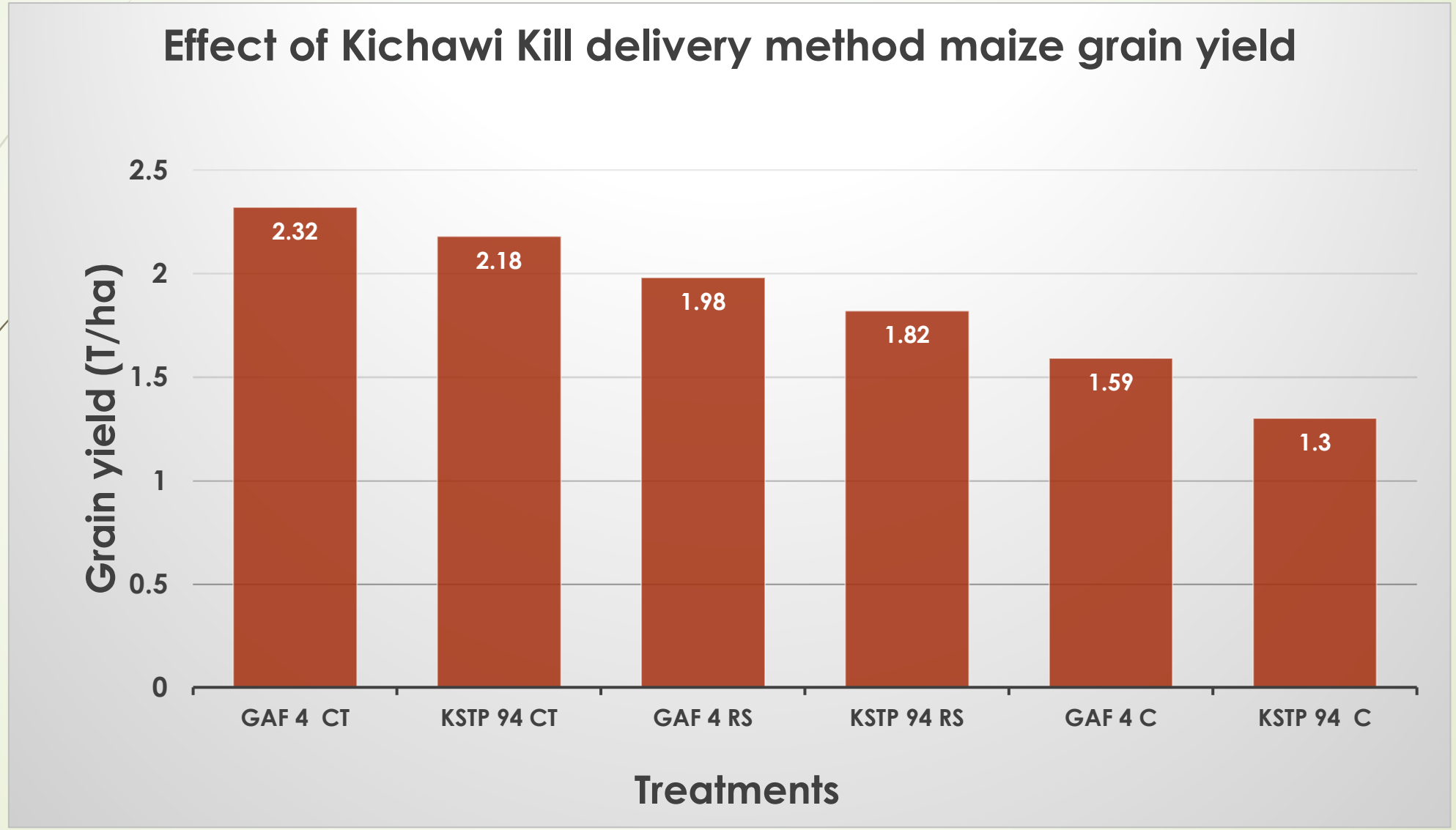


The differences in Bungoma, Kakamega and Siaya have been highly significant.

Results of a trial carried out by KALRO in Kibos (2021)



Results of a trial carried out by KALRO in Kibos (2022)



Results of a trial carried out by KALRO in Kibos 2022