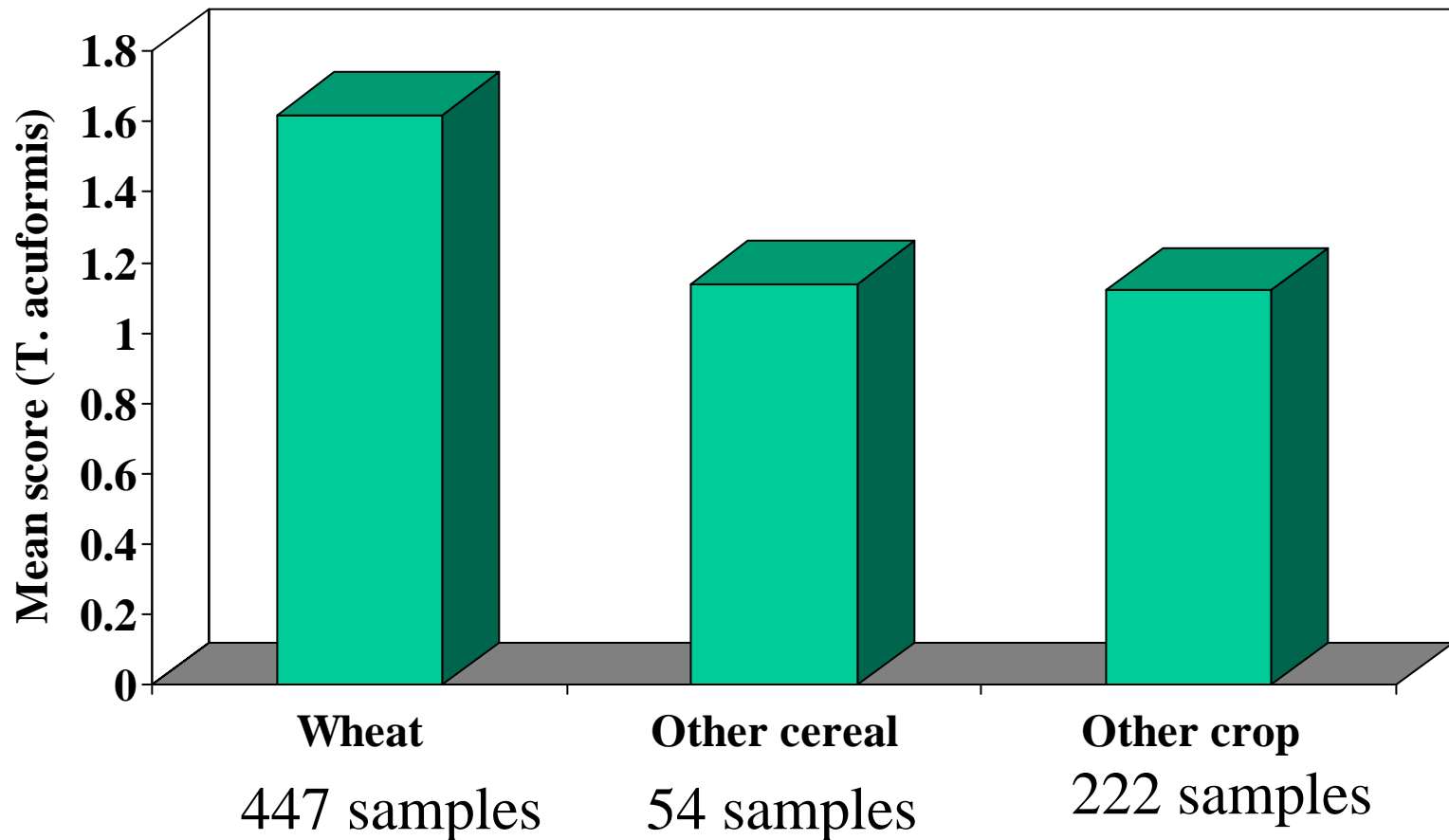


Effect of previous crop on *T. acuformis* (R-type eyespot) levels in wheat seedlings (GS 31-39) (Q-PCR analysis)



Effects of fungicides on grain yield (t/ha) at three sites over three years (1997-9)

Fungicide	Cultivar		
	Lynx (<i>Pch1</i>)	Mercia (<i>Pch2</i>)	Soissons (nil)
Prochloraz (W type only)	0 (9)	0 (9)	0 (9)
Cyprodinil (W and R type)	0 (9)	2 (9)	3 (9)
Azoxystrobin (take-all)	2 (9)	3 (9)	3 (9)

Implications of eyespot resistance for stem base disease

- Susceptibility of cultivars to foot rot pathogens (*M. nivale*) similar to those to eyespot (similar resistance or prevention of secondary infection (Bateman et al., 2000)).
- Effect of W and R-type eyespot additive on susceptible cultivars but competitive on resistant cultivars (unpublished).

Eyespot resistance

- Pch1- effective against W & R-type (resistance effect diminishes as plant develops (Lind, 1999)).
- Pch2 - more effective against R than W-type (unpublished).
- Pch3 - more effective against W than R- type (Uslu et al., 1998).
- Cappelle Desprez - additional seedling resistance (5D and others), adult plant resistance 5A (Muranty et al., 2002).
- *T. monococcum* - differential effects against W and R-type (unpublished).

Eyespot resistance cont.

- *T. monococcum* – some high levels of resistance (Cadle et al., 1997) – only tested against W-type.
- *T. tauschii* – high percentage of accessions resistant (W-type only) (Yildirim et al., 1995)
- Tetraploids – moderate levels of resistance (not as high as *T. tauchii*) (Figliuolo et al., 1998)
- Eyespot resistance: under-exploited but further promising resistance is available (emphasise adult plant alongside seedling resistance).
- Further work on the genetic basis of resistance is required and emphasis on ensuring resistance against both W and R types.