Harvest index for biomass and nitrogen in maize crops limited by nitrogen and water

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Background

Estimates of land under maize:

- **Silage:**
  - 6000 ha (1994-95)
  - 40,500 ha (2004-05)
  - 68,100 ha (2014-15)

- **Grain:**
  - 16,500 ha (1994-95)
  - 20,500 ha (2004-05)
  - 21,600 ha (2014-15)

Distribution & farming system:
- Mainly North Island
- Area expanding SI for silage
Results

Key findings:

» Ng% increased with both water and N supply.

» The NHI was closely related to the amount of grain yield. Therefore, improving the HI of maize crops is one way to improve the ability of the crops to utilise N from both soil and fertiliser sources.

» Treatments with high water availability caused higher NHI values in crops.
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