

Fungicide efficacy – *Ascochyta* blight

chickpeas and field peas

With the development of resistance to the QoI fungicides, **four fungicide modes of action are available for managing *Ascochyta* blight.**

DMI (FRAC 3): Proline

SDHI (FRAC 7): Endura, Vertisan, and premix fungicides

FRAC 29: Omega (chickpeas only)

MULTI-SITE ACTIVITY (FRAC M): principally chlorothalonil (Bravo Weatherstik, Echo 720, etc.)

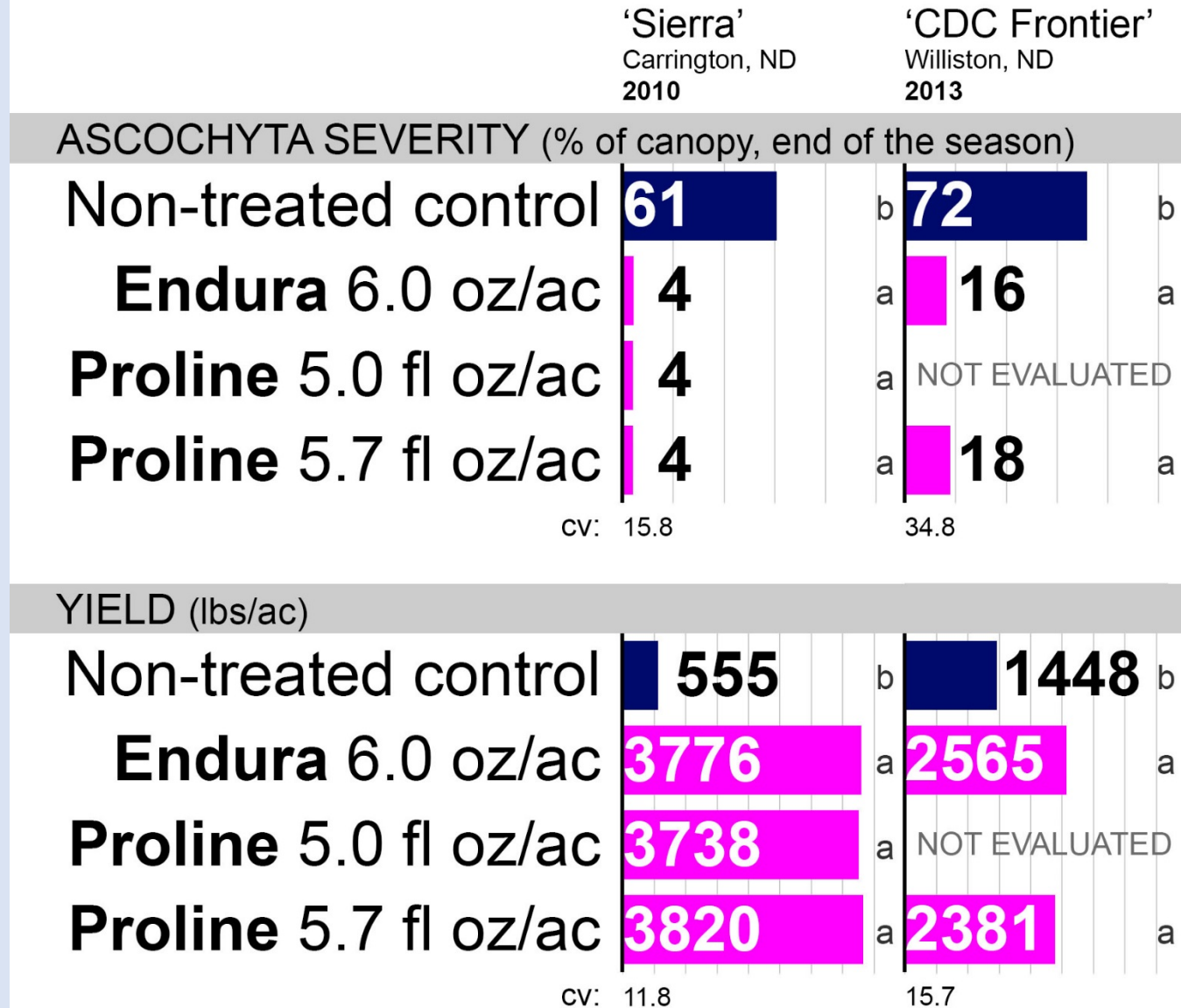
Fungicide efficacy – chickpea *Ascochyta*

SDHI fungicides (FRAC 7) - Endura

Under moderate disease pressure, Endura has been equally effective as Proline.

Endura 70WG:
boscalid
mode of action: SDHI

Proline 480SC:
prothioconazole
mode of action: DMI



Fungicide efficacy – chickpea *Ascochyta*

SDHI fungicides (FRAC 7) - Endura

Under severe disease pressure, Endura has been less effective than Proline.

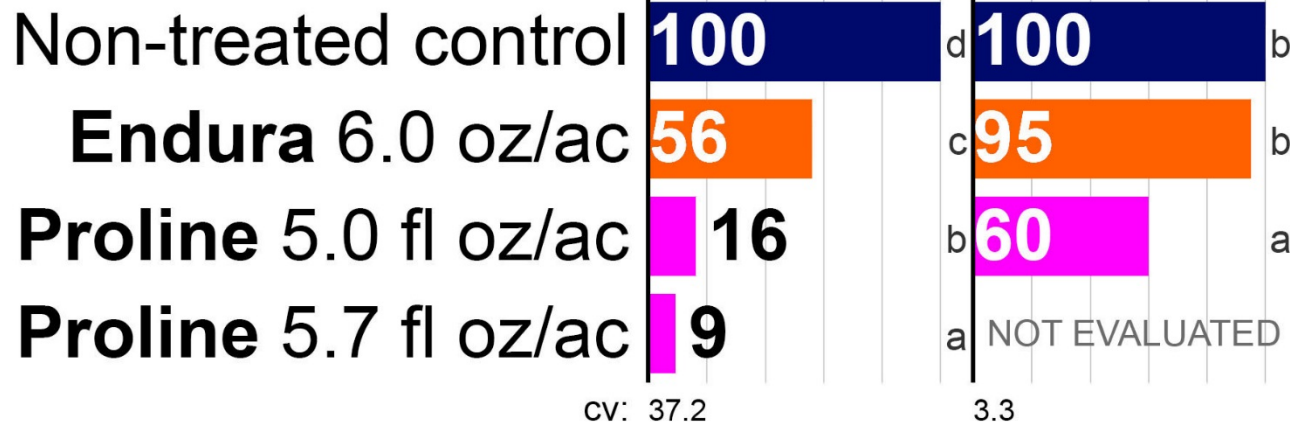
Endura 70WG:
boscalid
mode of action: SDHI

Proline 480SC:
prothioconazole
mode of action: DMI

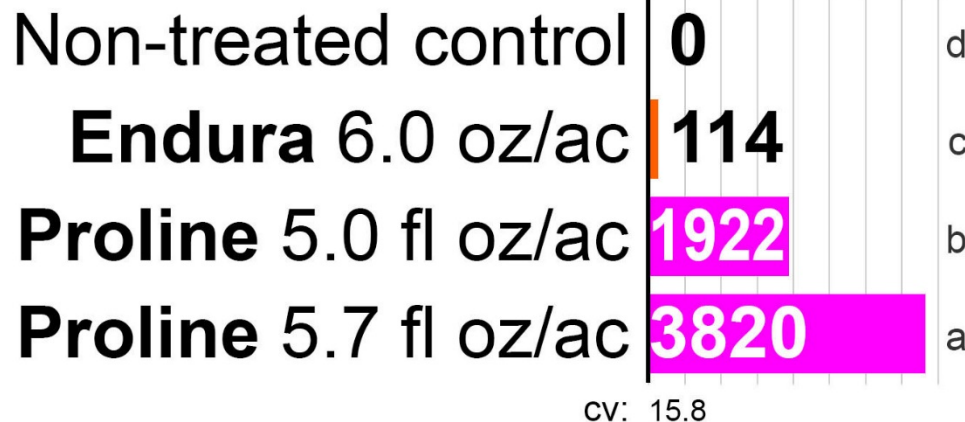
'Sierra'
Carrington, ND
2009

'CDC Xena'
Minot, ND
2011

ASCOCHYTA SEVERITY (% of canopy, end of the season)



YIELD (lbs/ac)



Fungicide efficacy – chickpea *Ascochyta*

SDHI fungicides (FRAC 7) - Priaxor

Due to QoI resistance,

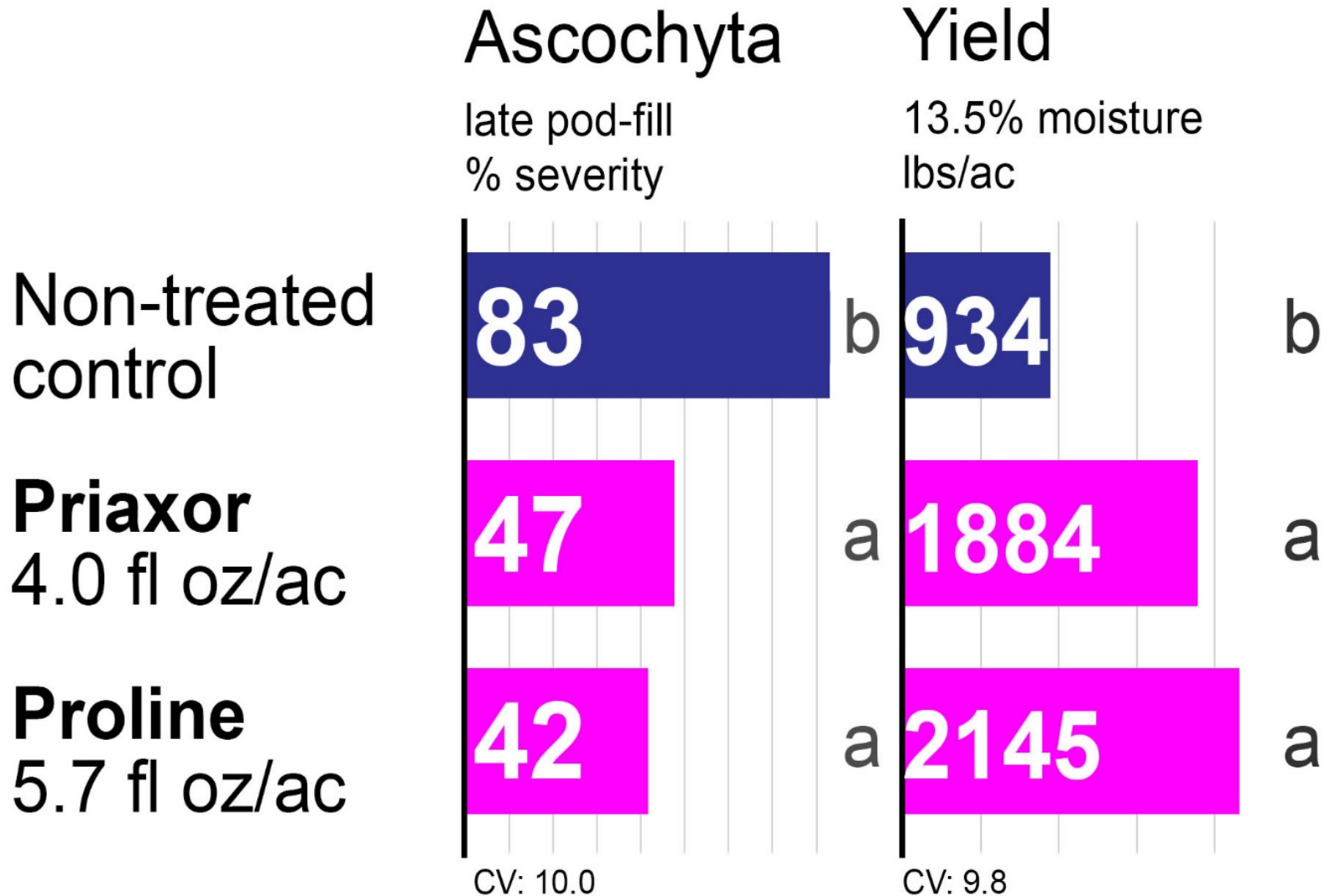
Priaxor is essentially a SDHI fungicide when applied to chickpeas to manage *Ascochyta* blight.

Active ingredients in Priaxor:

- pyraclostrobin (QoI)
- fluxapyroxad (SDHI)

Fungicide efficacy – chickpea *Ascochyta*

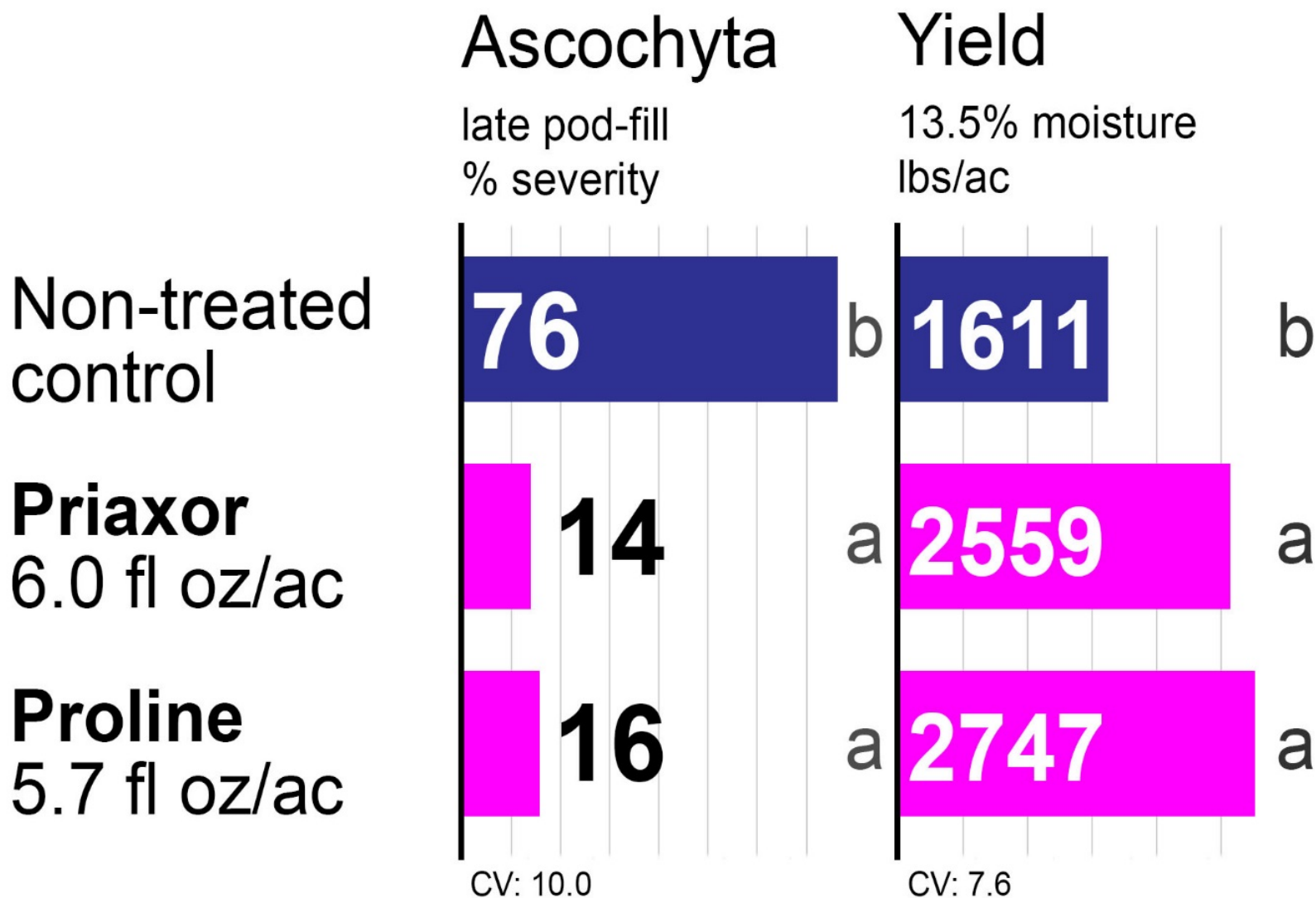
SDHI fungicides (FRAC 7) - Priaxor



Combined analysis across four field trials (Carrington and Williston, ND)

Fungicide efficacy – chickpea *Ascochyta*

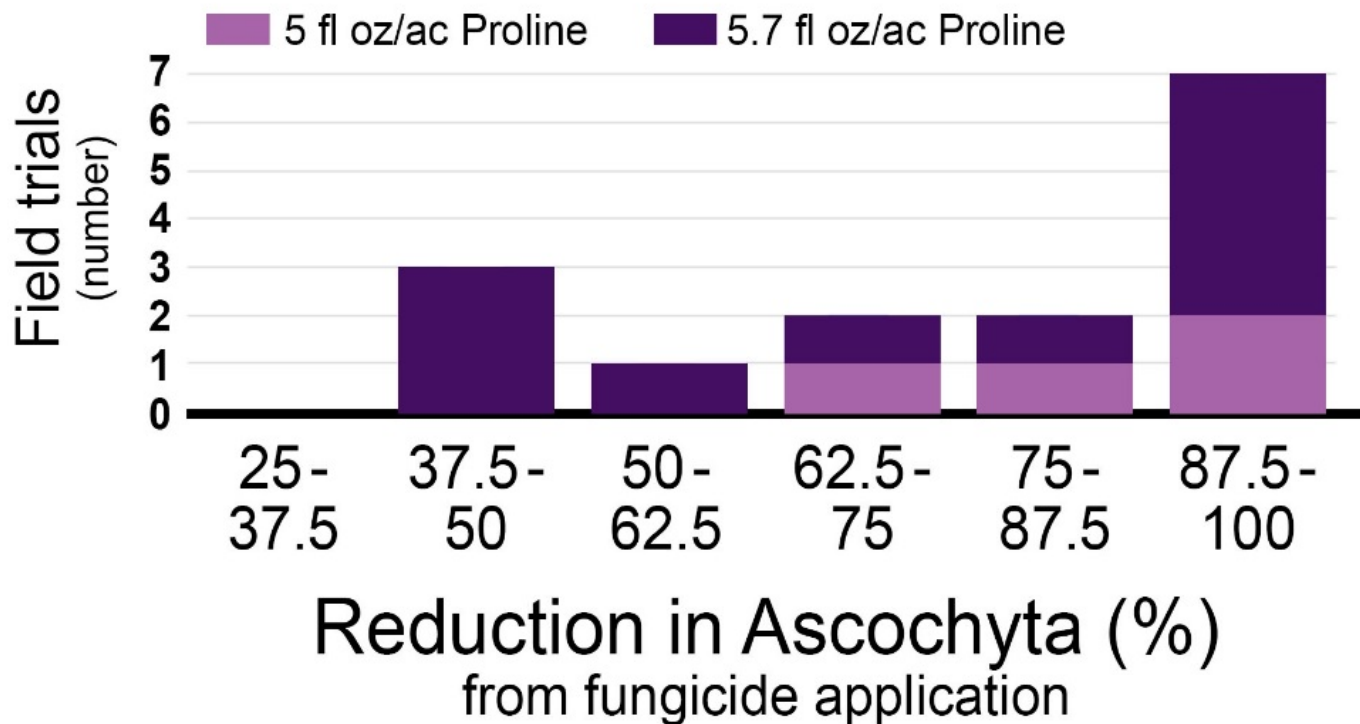
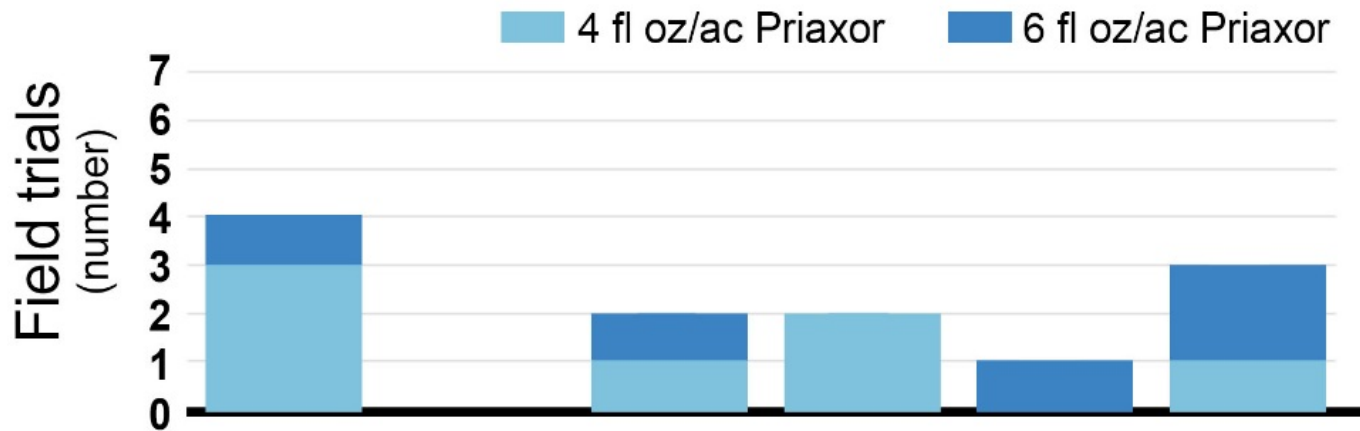
SDHI fungicides (FRAC 7) - Priaxor



Combined analysis across three field trials (Carrington and Williston, ND)

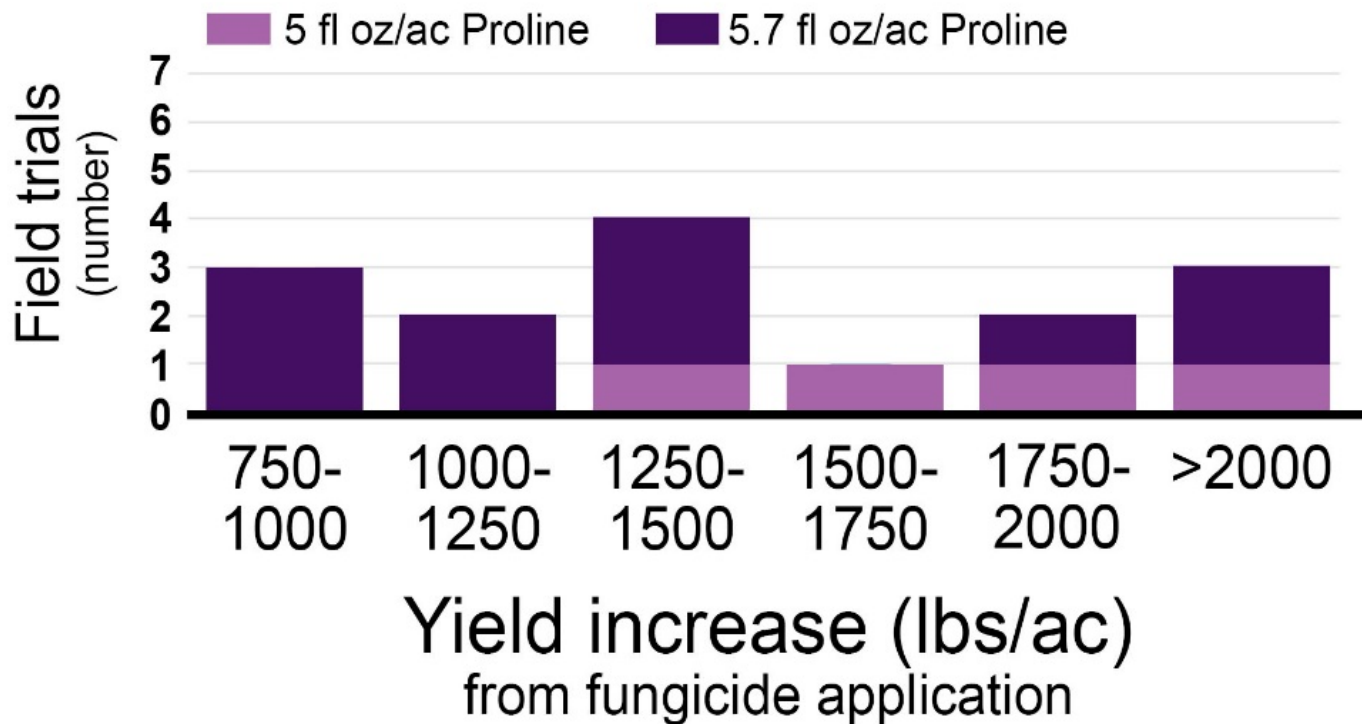
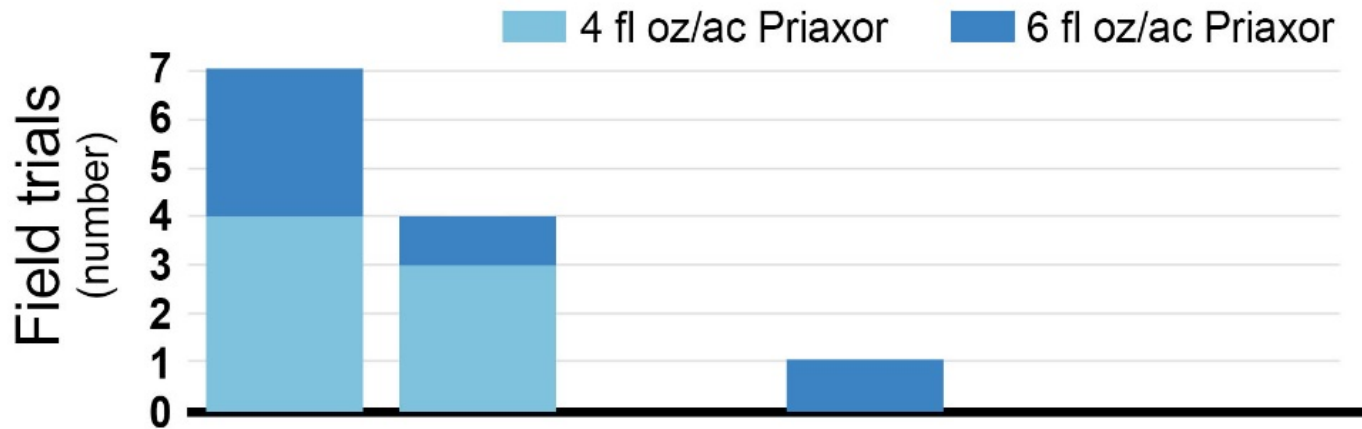
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SDHI fungicides (FRAC 7) - Priaxor



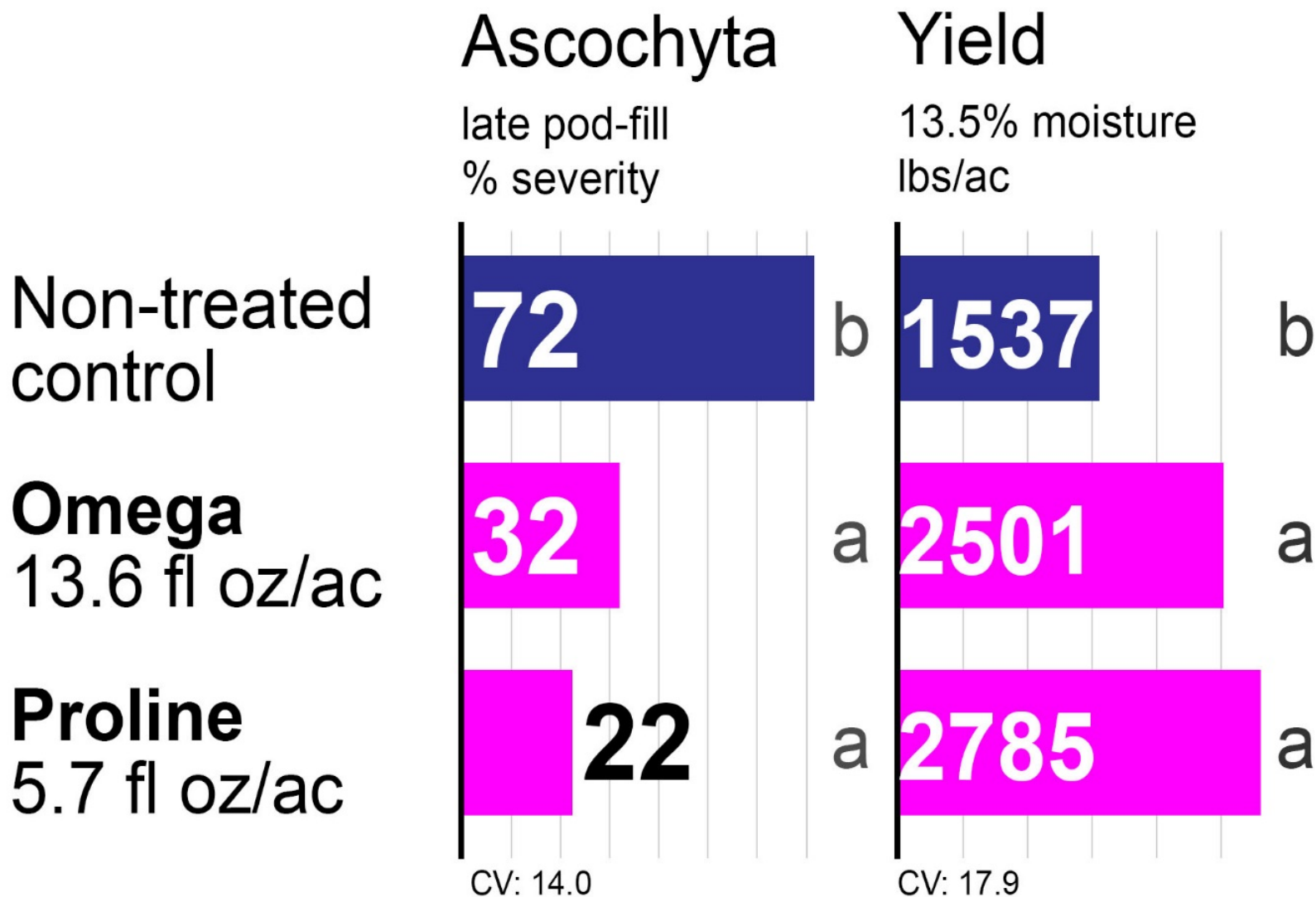
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SDHI fungicides (FRAC 7) - Priaxor



Fungicide efficacy – chickpea *Ascochyta*

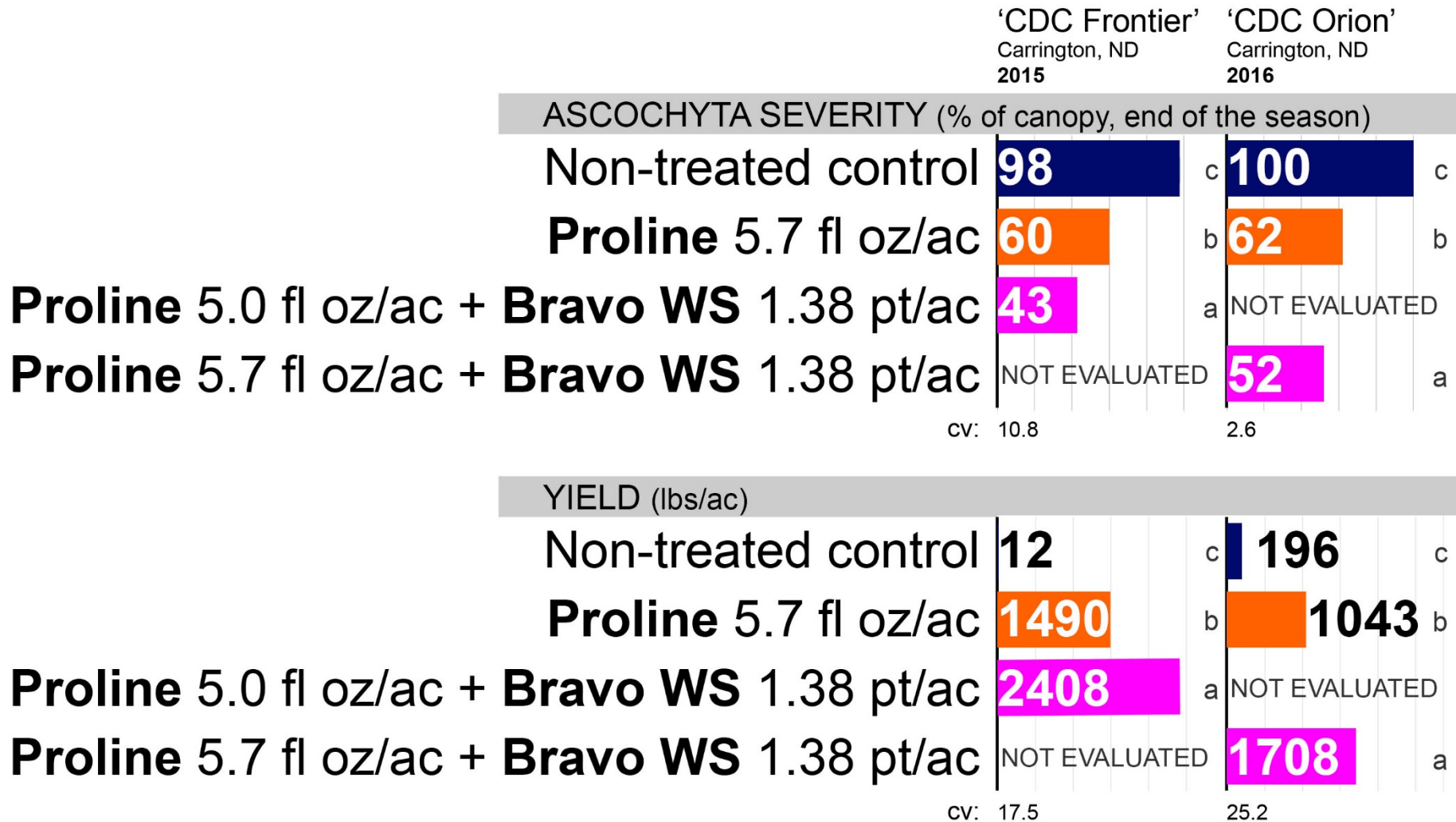
FRAC 29 fungicide - Omega



Combined analysis across three field trials (Carrington and Williston, ND)

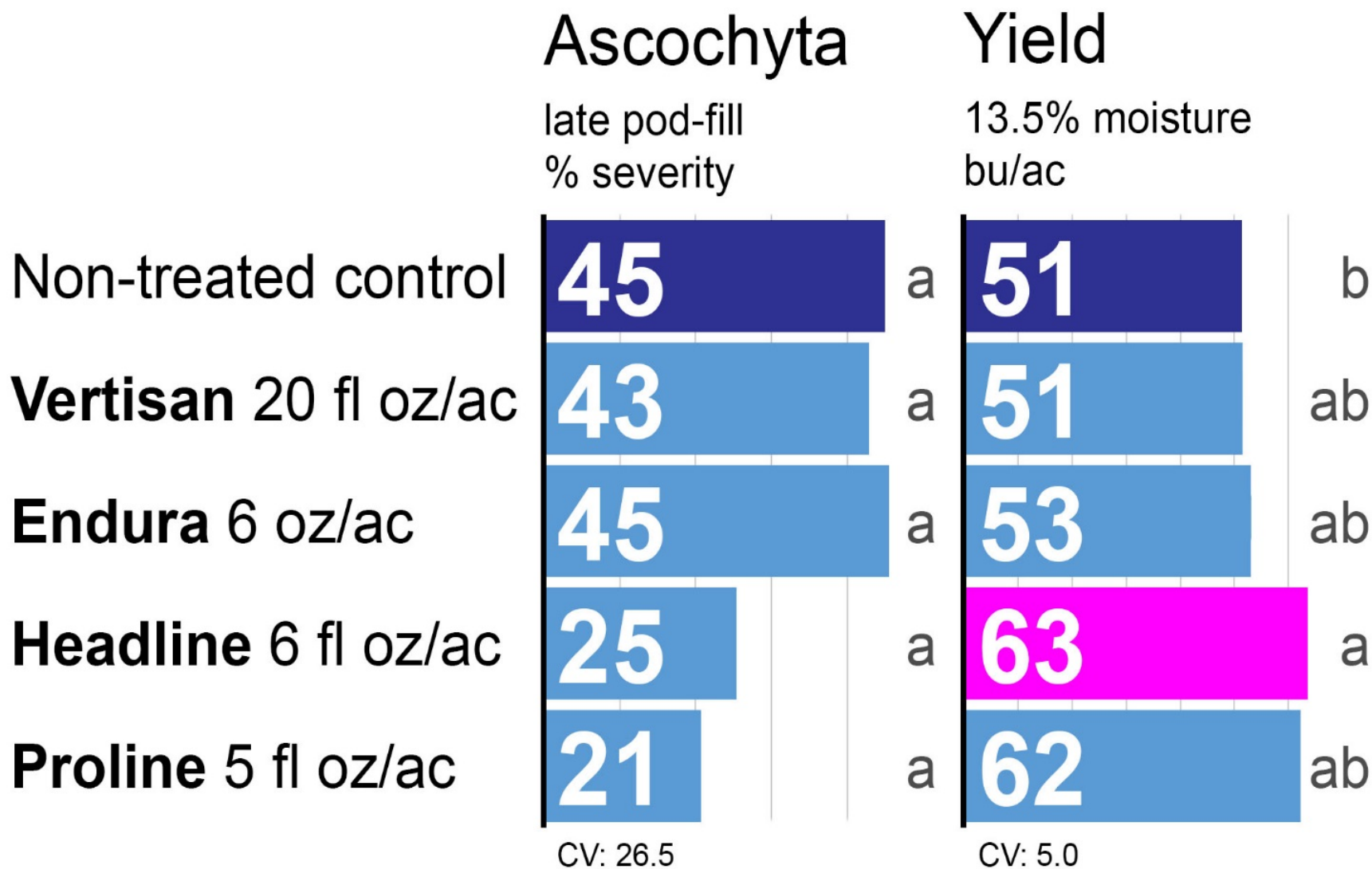
Fungicide efficacy – chickpea *Ascochyta*

FRAC M fungicide - chlorothalonil



Fungicide efficacy – field pea *Ascochyta*

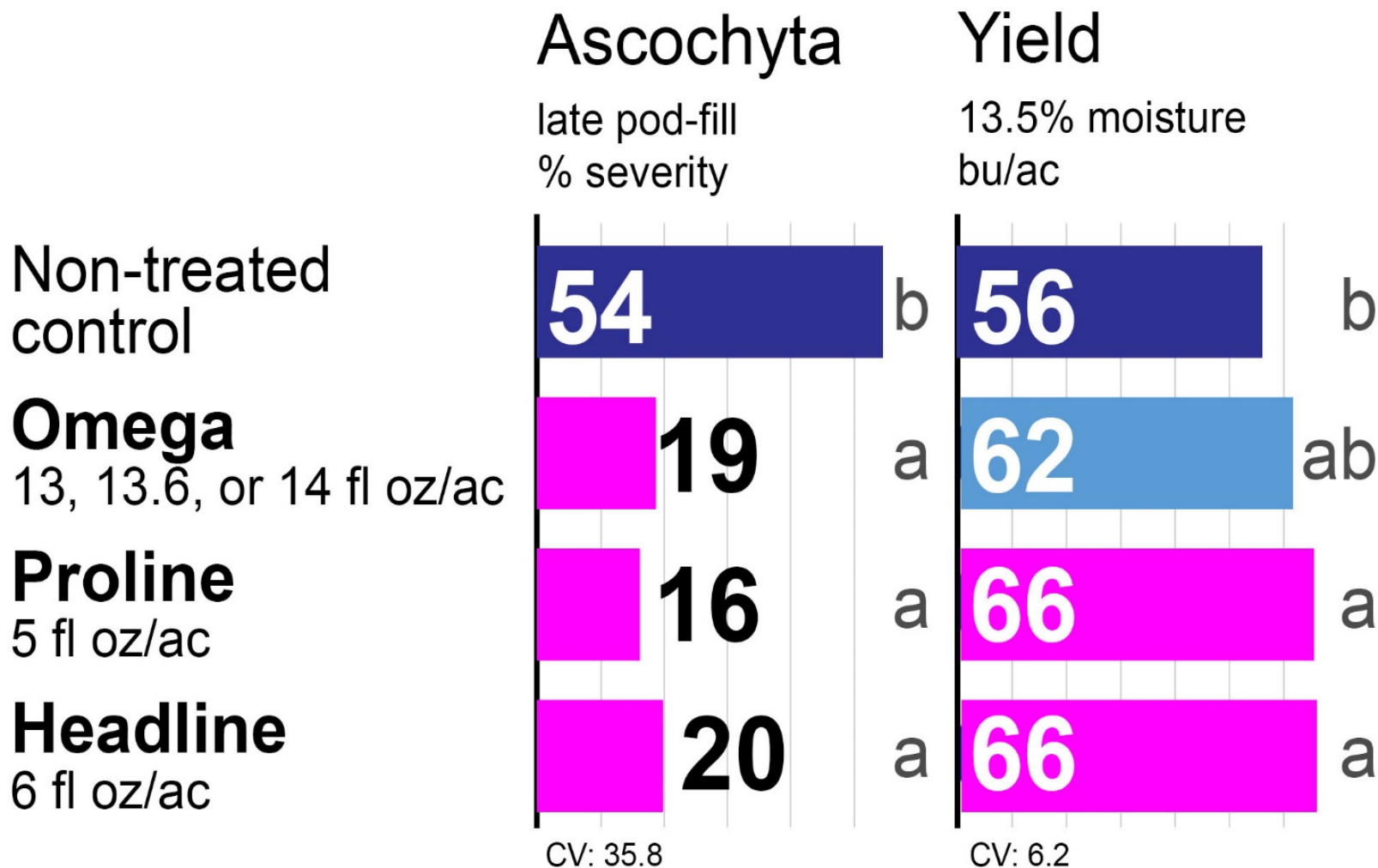
FRAC 7 fungicides - Endura and Vertisan



Combined analysis across two field trials (Carrington, ND)

Fungicide efficacy – field pea *Ascochyta*

FRAC 29 fungicide – Omega



Omega is not currently registered for use on field peas.

Combined analysis across four field trials (Carrington, ND)