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Seed, Seed! Managing Weeds and Reducing Yield Loss in Flax

Lena Syrovy and Steve Shirtliffe



Part I – Cover Crops for Weed Control

Year 1 – Flax (without or with winter cereal)

Flax only (no cover crop)

Flax + Winter Barley

Flax + Winter Wheat Flax + Fall Rye

OF

Photos: H.S.N. Duddu

Year 2 - Cereal





Flax + Winter Wheat

Flax + Fall Rye







Weed Suppression





Year 1 - Flax "suppression"

No cover crop vs cover crop: P = 0.04





Year 2 – Cereal Yield





Reduced Cover Crop Seeding Rates

1x = 200 targeted plants m⁻² 0.5x = 100 targeted plants m⁻²





Flax + Winter Cereal





Part II – Mechanical Weed Control





10" row cultivation organic hemp Kroeker Farms/Poplar Grove Organics

Slide credit: K. Stanley





Pre-emergence or after flax crop rooted







Slide credit: O. Alba



All Plots Herbicide Free

Redlick et al., 2014, Weed Sci. 65(4): 525-533



IWM for organic flax



Increased crop seeding rates

Rotary hoe

Inter-row cultivation



IWM for organic flax





Flax Tolerance to Rotary Hoe



2000 plants/m²





Photos: Y. Shen









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