USDA U.S. DEPARTMENT OF AGRICULTURE

TRITICALE

COVER CROP FACT SHEET FOR IOWA

Triticale Seed

Triticale *(Triticum x Secale)* is a deep-rooted cool-season/winter annual grass that resembles wheat and cereal rye. The plant looks like wheat, but the awns resemble cereal rye. *(Photo by Jason Johnson)*

Identifying Features

- Blunt and sometimes hairy auricles
- Leaf sheaths and blades are typically hairy
- Medium length ligule

Cultural Traits

- Cool-season/winter annual grass
- Minimum germination soil temperature: 38º F
- Cold tolerance temperature: -20º F (W) 20º F (S)
- Seeding date: Mid August to Late October* (F)***
- Seeding date: Late March to Late April* (S)***

Planting Information*

- **Drill** at ¾ - 1½ inches (45 lbs./acre PLS**)
- **Broadcast** (50 lbs./acre PLS)
- **Aerial** (55 lbs./acre PLS)

** Planting information from Midwest Cover Crop Council (midwestcovercrops.org). Refer to local NRCS office recommendations (Iowa Field Office Technical Guide, Section 4, 340 Cover Crop) for seeding dates and rates pertinent to location specific financial assistance program requirements.*
***Pure Live Seed*
****S=Spring F=Fall*

Additional planting information:

- ~13,000 seeds/lb. (1 bushel = 50 pounds)
- Increase seeding rate when planting on slopes or using triticale for forage/grazing.
- When interseeding triticale, time seeding to match appropriate growth and maturity.
- Broadcasting without incorporation is usually less dependable than drilling or broadcasting with incorporation.

Seedling

Mature

Cover crop grass growth comparison

C:N (Carbon:Nitrogen) Ratios

» Triticale	20:1

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Triticale in a vegetative stage.

Triticale is part of this 12-species cover crop mix. *(Brandon O'Connor)*

Performance

Dry matter = 2,000 - 5,000 lbs./acre per year
(Biomass quantity is dependent on planting and termination dates and precipitation.)

Performance Ratings	**Spring**	**Winter**
» Cash crop interseed *(early vegetative)*	Good	Good
» Cash crop overseed *(late seed fill)*	Very good	Excellent
» Grazing quality	Excellent	Excellent
» Mechanical forage harvest	Very good	Excellent
» Nitrogen fixer	NA	NA
» Nitrogen scavenger	Very good	Excellent
» Weed suppression	Very good	Very good
» Compaction fighter	Very good	Excellent
» Erosion control	Very good	Excellent
» Lasting residue	Good	Excellent
» Quick grower	Excellent	Excellent
» Drought tolerance	Good	Good
» Low fertility tolerance	Good	Good
» Shade tolerance	Fair	Fair

Additional Considerations

» Triticale could increase the risk of black cutworm and armyworm; risk of green bridge increasing pythium seedling disease; and is a host for penetrans root lesion nematode.

» Time cover crop **termination** based on goals and experience level. To reduce potential negative impacts on cash crops, consider terminating earlier in the season when conditions are dry or when green bridge or nitrogen tie-up are a concern. For crop insurance compliance, follow NRCS cover crop termination guidelines.

» Early season nitrogen applications can help reduce the effects of nitrogen tie-up by the cover crops.

This fact sheet is a collaborative effort of USDA's Natural Resources Conservation Service (NRCS) and Iowa State University Extension and Outreach to provide cover crop options and information for Iowa landowners.