CISCO's Cover Crop Guide - Volume 3 features up-to-date information on a vast array of common Midwestern cover crop species and N-Vest® mixes and blends. CISCO takes great pride in our N-Vest® program as we have spent countless hours researching cover crop mixes and blends in test plots across a four-state area. **Our goal is simple:** To provide the best species with top quality seed in the appropriate mixture or blend that works to help farms to become more sustainable. Our research is both on-farm and at University sites. Each of our research plots has either NRCS or SWCD, and/or university...and farmer oversight. We know that producers need the best when it comes to cover crops. We believe that the N-Vest® program provides the best for each producer. CISCO custom mixes cover crops for producers and we carry many additional species that are not listed in this guide. Please contact your local dealer for details on what is available.

**Helpful Websites:**
- www.mccc.msu.edu
- www.jaspercountyswcd.org
- www.plantcovercrops.com

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**A Word About “Dormant” Seed**

Certain species of seeds that we utilize for cover crops have shown a portion of dormant seed present and we believe that everyone utilizing cover crops should be aware of this phenomenon. “Dormant” seed contains properties that inhibit germination right away. These properties must be reduced by degrading or leaching out over time and thus allowing the seed to germinate. This is nature’s way of making sure the species continues. For example, if some disease or pest came through and eliminated every radish on earth, next year there would still be approximately 4% of radishes that would emerge as that is a normal level of dormancy for that species. Dormancy also occurs in annual ryegrass and crimson clover. We have had examples of a field planted in the fall of 2011 to annual ryegrass and radish, and in the fall of 2012, they had a better stand than the fall of 2011, and they never planted the cover crop in 2012. The stand was established from dormant seed leftover from the 2011 planting. We are working to determine normal dormancies for some of these species, but it is very inconsistent because it depends on seed production growing conditions and the age of the seed. The point is to be aware that this can happen and it is normally not a production detriment.
Cover Crop Benefits

- Reduce erosion
- Increase earthworm populations
- Improve soil microbiology
- Build soil tilth
- Produce and Scavenge nutrients
- Useful for manure management

Roots and Earthworms

- Increase soil tilth
- Increase soil porosity
- Increase soil aeration
- Increase “channels” for future row crop roots to follow
- Reduce compaction
- Increase nutrient recycling

- Improve yield potential over time
- Improve weed control of winter annuals
Common Midwestern Cover Crops Identified

Crimson Clover  Annual Ryegrass  Cover Crop Radish

Oats/Rye/Turnips  Austrian Winter Peas  Sudangrass

Medium Red Clover  Hairy Vetch  Turnips

All photos (except Hairy Vetch) are property of The CISCO Companies and may not be used without permission.
CISCO Cover Crop "Cheat Sheet"

<table>
<thead>
<tr>
<th>Species</th>
<th>Seeding Rate/ac</th>
<th>Seeding Date</th>
<th>N produced (estimate)‡</th>
<th>N Scavenged?</th>
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<tr>
<td><strong>Clovers</strong></td>
<td></td>
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<tr>
<td>Alsike Clover</td>
<td>6-8#</td>
<td>Feb-April</td>
<td>60-120#</td>
<td></td>
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<tr>
<td>Berseem Clover</td>
<td>15-20#</td>
<td>Aug-Sept</td>
<td>60-150#</td>
<td></td>
</tr>
<tr>
<td>Crimson Clover</td>
<td>20-30#</td>
<td>Aug-Sept</td>
<td>60-150#</td>
<td></td>
</tr>
<tr>
<td>Mammoth Red Clover</td>
<td>10 to 12#</td>
<td>Feb-April</td>
<td>60-75#</td>
<td></td>
</tr>
<tr>
<td>Kura Clover</td>
<td>6 to 8#</td>
<td>April-May and Aug-Sept</td>
<td>100-150#</td>
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<tr>
<td>Ladino Clover</td>
<td>2-4#</td>
<td>April-May and Aug-Sept</td>
<td>50-100#</td>
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<td>New Zealand White Clover</td>
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<td>Rape</td>
<td>6-8#</td>
<td>April-May and Aug-Sept</td>
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<tr>
<td>Turnips</td>
<td>1-5# **</td>
<td>April-May and Aug-Sept</td>
<td>√</td>
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</tr>
<tr>
<td>Mustard</td>
<td>10-20#</td>
<td>April-May and Aug-Sept</td>
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<tr>
<td><strong>Cereal Grains</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winter Barley</td>
<td>2-3 bushel</td>
<td>Sept-Oct</td>
<td>√</td>
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<tr>
<td>Oats</td>
<td>2-3 bushel</td>
<td>March-April and Aug-Sept</td>
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<tr>
<td>Cereal Rye</td>
<td>1-2 bushel</td>
<td>Aug-October</td>
<td>√</td>
<td></td>
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<tr>
<td>Fall Triticale</td>
<td>1-2 bushel</td>
<td>Aug-October</td>
<td>√</td>
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<tr>
<td>Winter Wheat</td>
<td>1-3 bushel</td>
<td>Aug-October</td>
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<td>3-12#</td>
<td>Aug-Sept</td>
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<td><strong>Ryegrass</strong></td>
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<tr>
<td>Annual Ryegrass</td>
<td>20-40# **</td>
<td>March-April and Aug-Sept</td>
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<td>20-25#</td>
<td>Aug-Sept</td>
<td>100-150#</td>
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<tr>
<td>Annual Lespedeza</td>
<td>25-35#</td>
<td>Feb-March</td>
<td>60-100#</td>
<td></td>
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<tr>
<td>Chickling Vetch</td>
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<td>April-May and Aug-Sept</td>
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<td>Buckwheat</td>
<td>35-50#</td>
<td>Aug-Sept</td>
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<td></td>
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<tr>
<td>Sudangrass</td>
<td>25-40# **</td>
<td>June-early Aug</td>
<td>√</td>
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<tr>
<td>Sorghum-Sudangrass</td>
<td>15-50# **</td>
<td>June-early Aug</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Teffgrass</td>
<td>8-12#</td>
<td>June-early Aug</td>
<td>√</td>
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</tbody>
</table>

* if in mixes with cereal grains  ** higher rate for forage production "slow release" Revised December 2012
Aerial Applying Cover Crops into corn – When is the right time?

A few years back many said “August 15-25” was the right date to aerial seed cover crops into corn. However, we found out very quickly that “dates” cannot be set...but timing can be. While we know that August 15-25 often can be correct, we also know that following the calendar (like in the 2009 crop) can be a mistake. So let’s set a few guidelines that should help all of us have better success when aerial applying cover crops into standing corn.

Guidelines for success when aerial applying cover crops into standing corn:

⇒ Aerial apply cover crops when the corn plant is dried approximately to the ear.

⇒ Aerial apply cover crops when approximately 50% of the sunlight can reach the ground between the rows. (Walk in the field a few rows to determine this.)

⇒ For success, do not fly cover crops into corn that is immature (still very green). The seeds will most likely germinate and then mold (not enough sunlight to conduct photosynthesis and too moist of conditions). Rule of thumb—Do not plant into shade.

⇒ Make sure your herbicide selections are compatible with the cover crop species.

When is it too late to aerial apply cover crop seed into standing corn?

♦ You need 5-6 weeks of growing time for cover crops going into the winter for best winterhardiness and performance.

♦ Winter Cereal Rye is more “flexible” than annual ryegrass or other cover crops when it comes to the lateness of application.

♦ If corn will be harvested soon after an aerial application can be made, consider the cost of other types of cover crop applications (i.e. drilling the cover crop in after harvest). Utilize the lesser expensive application.
### Cover Crop Decision Making Chart

#### Previous Crop: Corn/Corn Silage

**Nitrogen Scavengers**
- Annual Ryegrass\(^3\) (A / D)
- Oats and Oilseed Radish\(^1\) (A / D)
- Oats and Turnips\(^2\) (A / D)
- Winter Rye\(^3\) (A / D)
- Winter Barley\(^3\) (A / D)
- Winter Triticale\(^3\) (A / D)
- Tri-Feast-Triticale/Italian Ryegrass\(^3\) Mix (A / D)

**Nitrogen Producers**
- Crimson Clover\(^3\) (A / D)
- Austrian Winter Peas\(^2\) (D)
- Hairy Vetch\(^3\) (A / D)

**Both Nitrogen Producers and Scavengers**
- N-Vest® Nutri-Builder Mix\(^3\) (A / D)
- N-Vest® Crimson Cover-All Mixture\(^3\) (A / D)
- N-Vest® Groundbreaker Mix\(^2\) (D)
- N-Vest® Forager Mixture\(^3\) (A / D)
  (Oats/Rye/Turnip Mix)(graze)
- Tri-Feast-Triticale/Italian Ryegrass Mix\(^3\) (A / D)
- Oats\(^1\) (A / D)
- Oats and Oilseed Radish\(^1\) (A / D)
- Annual Ryegrass\(^3\) (haylage, grazing) (A / D)

**Guidelines for success when aerial applying cover crops into standing corn:**

⇒ Aerial apply cover crops when the corn plant is dried approximately to the ear.

⇒ Aerial apply cover crops when approximately 50% of the sunlight can reach the ground between the rows. (Walk in the field a few rows to determine this.)

⇒ For success, do not fly cover crops into corn that is immature (still very green). The seeds will most likely germinate and then mold (not enough sunlight to conduct photosynthesis and too moist of conditions).

⇒ Rule of thumb...don’t plant in the shade.

---

1 = expect winterkill
2 = may overwinter
3 = expect to live over-winter
A = Aerial Application is dependable for stand establishment
D = Drilled is dependable for stand establishment
A / D = Aerial and/or Drilled is dependable for stand establishment

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### Cover Crop Decision Making Chart

**Previous Crop: Soybeans**

#### Nitrogen Scavengers
- Annual Ryegrass\(^3\) (A / D)
- Oats and Oilseed Radish\(^1\) (A / D)
- Oats and Turnips\(^2\) (A / D)
- Winter Rye\(^3\) (A / D)
- Winter Barley\(^3\) (A / D)
- Winter Triticale\(^3\) (A / D)

#### Nitrogen Producers
- Crimson Clover\(^3\) (A / D)
- Hairy Vetch\(^3\) (A / D)

#### Both Nitrogen Producers and Scavengers
- N-Vest® Nutri-Builder Mix\(^3\) (A / D)
- N-Vest® Crimson Cover-All Mixture\(^3\) (A / D)

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**Guidelines for success when aerial applying cover crops into standing soybeans:**

⇒ Start aerial application of cover crops when the soybean plant is showing 25-50% yellowing of leaves.

⇒ Aerial apply cover crops when approximately 40-50% of the sunlight can reach the ground between the rows. (Walk in the field a few rows to determine this.)

⇒ For success, do not fly cover crops into soybeans that are immature (still very green). The seeds will most likely germinate and then mold (not enough sunlight to conduct photosynthesis and too moist of conditions).

⇒ Rule of thumb...don’t plant in the full shade.

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**Cover Crop for forage**

- N-Vest® Forager Mixture\(^3\) (A / D)
  - (Oats/Rye/Turnip Mix)(graze)
- Tri-Feast-Triticale/Italian Ryegrass Mix\(^3\) (A / D)
- Oats and Turnips\(^1\) (A / D)
- Oats and Oilseed Radish\(^1\) (A / D)
- Oats\(^1\) (A / D)
- Annual Ryegrass\(^3\) (haylage, grazing) (A / D)

---

1 = expect winterkill
2 = may overwinter
3 = expect to live over-winter

A = Aerial Application is dependable for stand establishment
D = Drilled is dependable for stand establishment
A / D = Aerial and/or Drilled is dependable for stand establishment
**Cover Crop Decision Making Chart**

**Previous Crop: Cereal Crops**

<table>
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<tr>
<th>Nitrogen Scavengers</th>
<th>Nitrogen Producers</th>
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<tbody>
<tr>
<td>Oats/Oilseed Radish(^1) Mixture</td>
<td>Crimson Clover(^3)</td>
</tr>
<tr>
<td>Oilseed Radish(^1) (plant mid-August)</td>
<td>Austrian Winter Peas(^2)</td>
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<tr>
<td>Oats(^1)</td>
<td>Forage Peas(^1)</td>
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<tr>
<td>Turnips(^2) (plant mid-August)</td>
<td>Hairy Vetch(^3)</td>
</tr>
<tr>
<td>Rape(^2)</td>
<td>Cowpeas(^1)</td>
</tr>
<tr>
<td>Winter Rye(^3) (plant mid-August and later)</td>
<td>Berseem Clover(^1)</td>
</tr>
<tr>
<td>Annual or Italian Ryegrass(^2) (plant mid-August)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Both Nitrogen Producers and Scavengers</th>
<th>Cover Crop for forage</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Vest® Crimson Cover-All Mixture(^3) (plant mid-August)</td>
<td>Sudangrass(^1) (dry hay, haylage, or graze)</td>
</tr>
<tr>
<td>N-Vest® Groundbreaker Mix(^1) (plant mid-August)</td>
<td>Sorghum-Sudangrass(^1) (haylage or graze)</td>
</tr>
<tr>
<td>N-Vest® Nutri-Builder Mix(^3) (plant mid-August)</td>
<td>Teffgrass(^1) (dry hay, haylage, graze)</td>
</tr>
</tbody>
</table>

| Frost seeded into cereal crop | | |
|-----------------------------|-----------------------|
| 60/40 Plowdown\(^3\) | Sudangrass\(^1\) (dry hay, haylage, or graze) |
| 80/20 Plowdown\(^3\) | Sorghum-Sudangrass\(^1\) (haylage or graze) |
| Mammoth Red Clover\(^3\) | Teffgrass\(^1\) (dry hay, haylage, graze) |
| Medium Red Clover\(^3\) | Oats and Oilseed Radish\(^1\) (graze) |
| Alsike Clover\(^3\) | Oats and Turnips\(^1\) (graze) |
| Yellow Blossom Sweet Clover\(^3\) | Oats\(^1\) (dry hay, haylage, graze) |
| White Clover\(^3\) | Annual or Italian Ryegrass\(^3\) (haylage, graze) |

\(^{1}\) = expect winterkill
\(^{2}\) = may overwinter
\(^{3}\) = expect to live over-winter

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Crimson Cover-All Mix

N-Vest® Crimson Cover-All Mixture consists of winterhardy Crimson Clover and cover crop radishes. This mix both produces and scavenges nitrogen.

Benefits of Crimson Cover-All Mix:
- Produces Nitrogen
  - University tests in western Indiana showed winterhardy Crimson Clover produced over 140 pounds of N/acre.
- Scavenges Nitrogen
  - Tests have shown cover crop radishes have scavenged as much as 130 pounds of N/acre (tops and tubers combined—with manure applied).

Planting tips:
- Planting Rate: 17-20#/acre
- Planting Depth: 1/4—1/2” deep
- Planting Time: July to early September (plan on planting at least 6 weeks before killing frost)

Cover crop radish tubers provide excellent nutrient scavenging and soil building characteristics.

Winterhardy Crimson Clover and cover crop radish make a tremendous cover crop mixture. Winterhardy Crimson Clover produced over 140 pounds on N in the field pictured above and to the left.

602 N. Shortridge Rd
Indianapolis, IN 46219
1-800-888-2986
www.ciscoseeds.com
N-Vest® *Forager Mix* is a combination of Oats, Winter Rye, and Forage Turnips. *Forager Mix* is an excellent choice for aerial application into standing row crops. The oats and turnips grow the fastest in the fall and the rye is available for grazing over the winter and spring.

Benefits of *Forager Mix*:
- Provides excellent feed for cattle
  - Cattle gained 3.5#/day weight gain in Illinois tests on *Forager Mix*
- Produces deep roots
- Scavenges Nitrogen
- Yields in corn crops following *Forager Mix* have shown increased yields

**Planting tips:**

- **Planting Rate:** 105#/acre**
- **Planting Depth:** 1/2” - 3/4” deep
- **Aerial Seeding:** Recommended
- **Planting Time:** July to early September (plan on planting at least 6 weeks before killing frost)

**105#/acre is suggested to get maximum forage yield. If utilized for cover crops only, this rate can be reduced.**
Groundbreaker Mix

N-Vest® Groundbreaker Mix is a combination of Austrian Winter Peas and cover crop radishes. This mix both produces and scavenges nitrogen.

Benefits of Groundbreaker Mix:
- Produces Nitrogen
  - A good stand of peas can produce up to 120 pounds of N/acre.
- Scavenges Nitrogen
  - Tests have shown cover crop radish have scavenged as much as 130 pounds of N/acre (tops and tubers combined—with manure applied).

The peas above and the forage cover crop radish to the right were from a field of Groundbreaker Mix following a wheat crop in north-central Ohio.

Groundbreaker can also provide excellent weed control. Note the photo to the left where there is a weed-infested “skip” in the planting of the Groundbreaker cover crop following a wheat crop.

Planting tips:
- Planting Rate: 35#/acre
- Planting Depth: 1/2”- 3/4” deep
- Planting Time: July to early September (plan on planting at least 6 weeks before killing frost)

Above: Excellent pea nodulation
N-Vest® NutriBuilder Mix is a combination of winterhardy Annual Ryegrass, winterhardy Crimson Clover, and cover crop radishes. This mix both produces and scavenges nitrogen.

Benefits of NutriBuilder Mix:

- ** Produces Nitrogen  
  - A good stand of this mix should produce up to 60-100 pounds of N/acre. 

- ** Scavenges Nitrogen  
  - Tests have shown cover crop radish have scavenged as much as 130 pounds of N/acre (tops and tubers combined—with manure applied). According to multi-State research, Annual Ryegrass can scavenge well over 300 pounds of N/acre.

Photos above and below shows what NutriBuilder looked like in the fall of 2010. This was planted following wheat.

This mix was impressive from emergence all of the way until we killed it in the spring. It continues to be impressive as the sweet corn planted where the NutriBuilder Mix was is the most impressive of the whole field! John Miller, Campbell Hill, IL

Each of the species in the NutriBuilder Mix have roots that provide an “earthworm heaven”! The photo to the right comes from a NutriBuilder plot.

Planting tips:

- ** Planting Rate:** 20-25#/acre  
- ** Planting Depth:** 1/2” - 3/4” deep  
- ** Planting Time:** July to early September (plan on planting at least 6 weeks before killing frost)

602 N. Shortridge Rd  
Indianapolis, IN 46219  
1-800-888-2986 ext 319  
www.ciscoseeds.com
Soilbuilder brand Annual Ryegrass Blend is formulated to provide excellent soil-building characteristics as well as the potential for outstanding forage production.

Uses of Soilbuilder:
Annual and Italian ryegrasses have dense fibrous roots and have proven to be effective in improving soil structure. Soilbuilder is comprised of proven winterhardy varieties that provide an excellent opportunity for greatest success. As with any ryegrass used as a cover crop and not for forage; we recommend killing the ryegrass at 6-8” tall in the early spring to assure best control. Soilbuilder can produce as much as five tons of high quality forage for dairy producers.

Soilbuilder provides both deep roots and excellent forage production. After three years of no-till and continued use of Soilbuilder producers should see roots around 50” deep.

Soilbuilder has dense fibrous root that helps build soil structure.

Planting tips:
Planting Rate: 15-20#/acre drilled
Planting Rate: 20-30#/acre aerial applied
Planting Depth: 1/4 - 1/2” deep
Planting Time: August to early September (plan on planting at least 4-5 weeks before killing frost)

If aerial applying Soilbuilder - the corn should be drying up to the ears with approximately 50% of the sunlight hitting the ground between the rows.
Developed through extensive efforts by Dr. Gordon Prine (University of Florida) in conjunction with Dr. Jerry Baker (the Noble Foundation), **BRUISER** was selected through a six cycle breeding program for disease resistance and cold tolerance. **BRUISER** is a late maturing, widely adapted diploid annual ryegrass with the added benefits of disease resistance to crown rust resistant, some gray leaf spot resistance as well as helminthosporium leaf spot resistance, and it is tolerant to cold temperatures.

**Notable Characteristics**

- EXCELLENT COLD TOLERANCE
- LATE Maturity
- High Feed Quality
- Diploid Annual Ryegrass
- Bred for Crown Rust Resistances
- Excellent Palatability/Digestibility
- Gray Leaf Spot Resistances
- Fast establishing

### Scottsbluff, NE 2003-2004 Growing Season

**Cold Tolerance**

<table>
<thead>
<tr>
<th>Ryegrass entry</th>
<th>Cold damage rating* 5/14/04</th>
<th>% Surviving Plants 3/25/04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stockaid</td>
<td>4.2 ab</td>
<td>94.0 ab</td>
</tr>
<tr>
<td>Marshall</td>
<td>4.0 abc</td>
<td>77.4 a-g</td>
</tr>
<tr>
<td><strong>BRUISER</strong></td>
<td>3.8 abcd</td>
<td>79.4 a-f</td>
</tr>
<tr>
<td>Surrey II</td>
<td>3.4 bcde</td>
<td>75.0 a-g</td>
</tr>
<tr>
<td>Brigadier</td>
<td>3.2 cde</td>
<td>69.2 b-g</td>
</tr>
<tr>
<td>Gulf</td>
<td>3.0 def</td>
<td>61.0 e-i</td>
</tr>
<tr>
<td>Jumbo</td>
<td>1.4 h</td>
<td>16.2 k</td>
</tr>
</tbody>
</table>

*Cold damage rating: 0 = no living plants, 100% damage; 5 = all plants surviving, no damage

**Applications:**

- Beef, dairy, and other livestock forages systems to be utilized as pasture, intensive grazing, green chop, haylage, or dry hay.
- Quick cover and quick forage yield.
- Short-term renovation
- Fall overseeding into row-crops

**Method of Seeding & Seeding Rates:**

Use a Brillion seeder, a no-till drill or broadcast followed by a culti-packer. **BRUISER** can also be frost seeded. Seed to soil contact is vital to having a successful stand. Plant ¼" deep.

**New fields/pasture:** 40-45 lbs. /acre

**Renovation/Overseeding existing fields/pastures:**

- Pastures: 25–35 lbs. /acre
- Alfalfa Hay Field: 3-5 lbs. /acre

**Grazing and Harvest Tips:**

**BRUISER** is highly palatable; avoid over grazing. Graze at approximately 10-12 inches and remove animals when at 3-4 inches. When grazing **BRUISER**, consider reduce grain levels and consider adding more fiber to the ration. If machine harvesting disc mowers and drum mowers are highly preferred. For high quality hay, harvest 1st cutting at boot stage. *As with any forage, management practices dictate the yield and quality of the forage nearly as much as the genetics of the product. With proper management practices, **BRUISER** should provide high yielding, high quality forage that should result in improved producer profitability.

**Winter Hardy!!!** In the winter of 2005-06, in the University of Kentucky annual ryegrass trial, **WINTER HAWK** had the best seedling vigor and 100% stand survival through the winter.

### Scottsbluff, NE 2005-2006

<table>
<thead>
<tr>
<th>% survival</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WINTER HAWK</strong></td>
</tr>
<tr>
<td>Marshall</td>
</tr>
<tr>
<td>Surrey II</td>
</tr>
<tr>
<td>Brigadier</td>
</tr>
<tr>
<td>Gulf</td>
</tr>
</tbody>
</table>
Notable Benefits:
- Scavenges nutrients
- Reduces soil compaction
- Promotes water infiltration
- Increases earthworm activity
- Promotes water infiltration
- Increases earthworm activity
- Supresses weeds
- May reduce use of chemicals and tillage

GroundHog is a true variety. It will exhibit consistent performance year after year.

Description: GroundHog brand cover crop radish produces a significant root mass. This extra large root system allows GroundHog to pull nitrogen and other nutrients from deep within the soil and bring them back to the surface. Upon decomposition, these roots leave large channels in the soil that improve water infiltration and soil aeration. Tests have shown that cover crop radish can scavenge over 150 lbs of nitrogen per acre. The scavenged nitrogen becomes available to the next cash crop or increases soil organic matter.

Sowing and Establishment: Seed from early August to September (earlier in the north and later in the south) at 10-12 lbs per acre or at 3-5 lbs per acre when mixed with legumes and/or grasses. Sow ¼-3/4 inch deep. Aerial seed into soybeans before leaf drop (~½ leaves yellow) and into corn when the corn is dried up to the ear (for ~50% of sunlight to reach ground between the rows). Apply 60 units of N or manure for best root growth potential.

GroundHog works very well in mixes with Crimson Clover, Austrian Winter Peas, Annual Ryegrass, Turnips, and many other cover crop species. The photo below shows GroundHog with Crimson Clover.

Now with Pinnacle QuickStart coating!
Expect the following from Pinnacle Quickstart:
-- Increases seed & seedling survival
-- Establishes a microenvironment for stimulating vigorous growth in young seedlings
-- Achieves better seed to soil contact to aid germination
-- Hygroscopic nature of the coating pulls & holds moisture to the seed aiding germination
-- Encapsulates each seed in a carefully formulated mix of minerals & selected nutrients
-- Specifically formulated micronutrient package of Fe, Mg, & Zn
-- Coating disguises seed for less bird predation
-- Colorant on the seed improves monitoring of area seeded & seeding rate
-- Increases stand & survival under adverse conditions
-- Added weight from coating material:
  -- makes seed larger & easier to handle & distribute evenly
  -- less puddling of seed – seed stays put in over watering conditions
-- penetrates stubble or thatch for better seed to soil contact
-- increases spread width up to 40%

Get better, more consistent stands with Pinnacle QuickStart!