Crimper Crop Roller Tips

- Thick cover crop stands crimp better. Crimping increases sunlight, mulches soil, and saves water.
- Crimpers use a flat .25-inch blunt blade to crush the vascular system every 7 inches. Do not sharpen the blades, as this be similar to mowing and the plant may recover and start growing again.
- In general, the earlier planted cover crops typically allows for earlier spring crimping.
- If dry weather is expected, terminate cover crops early with sprays. Once a plant starts to die, it loses turgor pressure and may be harder to crimp, especially if sprayed. Several options for a good crimp after spraying:
  1) Crimp it twice in opposite directions.
  2) Crimp at a slight angle. Sometimes crimping straight down the row results in an elevation difference between the row and the center of the row, resulting in less desirable crimp between rows. Crimping at slight angle allows crimper to roll up and over the elevation difference and then down, resulting in a better crimp.
  3) Optimal crimper speed is 8-10 mph. If the ground is dry and hard, the crimper may bounce and result in less effective crimping. Try slowing down.

Plants that Can be Crimped or Crop Rolled

- Grass cover crops: cereal rye, oats, barley, triticale, wheat, sorghum sudan, millets
- Legumes: hairy vetch, common vetch
- Peas: winter peas, cowpeas
- Clovers: Balansa, crimson clover
- Brassicas: Radish, Kale, Rape (Rape & Kale sometimes harder to crimp due to thicker stems but crimp well in mixtures with heavy cover)

HP Needs/Crimping Rate

- Minimum 120HP tractor is recommended for the 30ft Crimper.
- If operated at 8-10 mph, the 30ft crimper will operate at a rate of 30 acres per hour. Keep hydraulic lever in the float position for best crimping.

Plants that Cannot be Crimped or Crop rolled

- Grasses: annual ryegrass (stem and leaf is too flexible)
- Legumes: Alfalfa (crown prevents termination).
- Clovers: Red clover, white clover (Crown and rhizomes prevent good crimping or termination.)

Hazards

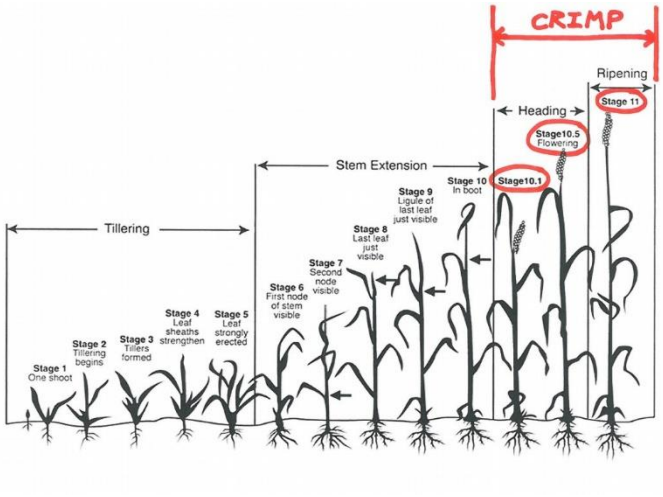
- While using the crimper crop roller, avoid sink holes, tile line blowouts, groundhog holes, rocks, trees, telephone poles, guidewires, fences, or trees.

Information provided with assistance from Jim Hoorman, Hoorman Soil Health Services

- When turning the implement, on 3-point hitch models, make sure you have enough weight on the front of tractor. Slow down on ends and lift the implement off the ground. Avoid making ruts on the ends, which occurs when turning sharp with the implement on the ground.
- On the road, lift all wings and lock the hydraulic cylinders with metal clips. Watch out for mailboxes, parked cars, telephone poles, etc.

Crimping First, Planting Second

- In general, it is easier and less problematic to plant green and crimp after the crop has emerged. Waiting for the cover crop to mature to the right stage results in delayed planting and yield loss.
- If you crimp first, plant in the same direction as crimping.
- Never plant perpendicular to the direction of crimping. This will result in tough residue and issues with hair pinning, poor seed to soil contact, reduced germination, and poor stands.
- Try to avoid crimping and planting into cover crops that lodge. This will create a weave pattern that is hard to plant into.
- Best crimping occurs when cereal grains (rye, wheat, barley) are at least in the boot stage or headed out.
- For legumes (peas, vetches) and clovers (Balansa, crimson), crimp when they start to bloom (10-20%) to maximize nitrogen production. With brassica (kale, rape) best time to crimp is the start of flowering.



Planting Green then Crimping

- **Corn**
  - Crimp corn after emergence from V3 to V4 (3-4 true leaves). Corn's growing point is below ground until V6 (6 true leaves) so it is safe to crimp corn.
  - Cereal rye is often used as a cover crop for corn. Cereal rye has an allelopathic effect that will suppress the growth of weeds, and also germinating corn. If corn is planted deep (2-3 inches deep), the new corn will emerge together and have a deeper well-established root. If corn is crimped from V3-V4, the allelopathic effect from the rye is minimized since the chemical is in the stem and leaves. Planting deep also enhances crop growth and minimizes slug and vole damage.
- **Soybeans**
  - Do not crimp when the soybean cotyledons are emerging. Once the cotyledon is lost, the soybean plant dies. Start crimping at 1st to 2nd trifoliate. Soybeans can be crimped up to 4-5 inches tall which stimulates bushing and pod formation with 5-7 bushels higher yield possible.

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