Cover Crop Fact Sheet

SUSTAINABLE FARMING ASSOCIATION • SFA-MN.ORG

Prepared by Kent Solberg, SFA Livestock & Grazing Coordinator/MDI Coordinator

- **Cover crops are** a "tool" that can provide substantial benefits to improving soil health, productivity and farm profitability.
- **Cover crops are not** a "silver bullet" but work best in combination with diverse crop rotations, no-till, and livestock integrated into the cropping enterprise through planned grazing.
- **Complex cover crop blends**, or "biological primers," typically consist of eight or more plant species in the mix.
- **Biological primers** have demonstrated their effectiveness in jump-starting the biological systems in many soil types and farm applications.
- **The more diverse** the complex cover crop mix, the better the response from soil microbes and the higher level of drought tolerance.
- **Biological primers** are customized to meet the needs and goals of a particular field and farm operation.
- **Previous crop history** and future cropping plans for a particular field are essential in determining a specific cover crop blend.
- **A sound crop rotation** must include representatives from each of the four major crop types: cool-season grasses, cool-season broadleaves, warm-season grasses and warm-season broadleaves (see table below for examples).
- **Drill boxes** are filled only one-third full when planting complex cover crop blends to minimize small seed from sifting to the bottom of the seed box.
- **Aim for 750,000-1,000,000** seeds per acre in cover crop blends.
- **Complex cover crop blends** may be mechanically harvested as forage; however, the greatest biological and economic impact typically occurs when grazing livestock harvest approximately one-third of the cover crop and trample the remainder to protect soil and feed microbes.

RESOURCES

SFA GrazeFest homepage: sfa-mn.org/grazefest

YouTube: Search "Innovative No-till" and "Slake and Infiltration Test"

Burleigh County (N.D.): bcscd.com

Cover Crop Chart: mandan.ars.nrcs

Midwest Cover Crop Council

SmartMix Calculator™: greencoverseed.com

EXAMPLES OF MAJOR CROP TYPES

Cool-season grasses: Oats • Barley • Wheat • Annual rye • Cereal rye • Triticale
Cool-season broadleaves: Field pea • Red clover • Hairy vetch • Common vetch • Turnip • Daikon radish
Warm-season grasses: Sorghum-sudan • Millets • Corn
Warm-season broadleaves: Soybean • Cowpea • Sunflower • Buckwheat