

## Overwintering Cover

### Tips to Accomplish Practice Standard

- Reference NRCS Appendix A (Cover Crop) for detailed requirements.

### Method/Timing

- Ensure the planned Overwinter Cover planting dates are compatible with the expected harvest date of the preceding cash crop or ensure alternative seeding methods are planned.
- Plan the method to establish the Overwinter Cover.
  - For cover crops, drilling/planting, aerial seeding, broadcast seeding and interseeding are acceptable.
  - An aerial, interseeded or broadcast seeding of cover crops, requires a 20% higher seeding rate than those shown in Figure 1 of NRCS Appendix A.
  - Frost seeded clover into wheat is acceptable, if the clover remains until March 15<sup>th</sup> of the following year.
- Early seeding is acceptable. If the grower plans to seed early and/or interseed Overwinter Cover before the Appendix A establishment window, the producer is accepting the risk of poor establishment due to herbicide carryover, inadequate moisture, and poor light conditions. The grower may forfeit payment if a poor stand results from deviating from Appendix A.

### Seed Quality

- The grower shall ensure the seed being used for the Overwinter Cover BMP meets the Appendix A seed quality standards including: % purity, % germination, % weed seed, and Ohio noxious weed content.
- If the grower plans to use bin-run seed, a seed test must still be submitted. ODA provides testing and others. See the ODA website for details:  
<https://agri.ohio.gov/divisions/plant-health/grain-warehouse-feed-and-seed/seed-testing>
- The “Seed Quality Adjustment Factor” (Figure 1) should be consulted to determine if a seeding rate adjustment is needed based on the grower’s germination and/or seed purity test results.
- If the seed being used is more than one year old at the time of planting, a seed test must be submitted.
- If the seed test lists any noxious or invasive weeds the seed must be cleaned to remove the weeds and retested before use until the test comes back with no noxious or invasive weeds listed.
- Once the above requirements are met, ensure the Pure Live Seed (PLS) seeding rate follows the respective seeding table:
  - Cover crop seeding rates are shown in Figure 2 for quick reference, or see NRCS Appendix A (Cover Crop) for more detailed information.
  - For forage seeding rates, see NRCS Appendix A (Forage Production and Erosion Control)
  - For small grain seeding rates, see Figure 2 or NRCS Appendix A for minimums, or relevant Agronomy guides for cash crop guidance.
- Pure Live Seed (PLS) is calculated as follows:  $[(\% \text{ Seed Purity}) \times (\% \text{ Seed Germination})] \div 100$ .
- Keep application records, which will ultimately be entered into MyFarms during the VNMP or CNMP Certification process.

**Example Calculations for Cover Crop Seed Mixes**

Planned Species or Species Mix	Standard Seeding Rate (lbs/ac PLS)	Scenario Requiring Rate Adjustment	Required Adjustment	Total PLS needed (lbs/ac)
Winter Rye	50	Aerial seeded = (+20% of normal rate)	50 x 1.20	60
Winter Rye	50	80% germ and 94% purity-adjustment needed, see App. A figure 1 below	50 x 1.16	58
Winter Rye / Spelt Mix	50/64	Two-way species mix	50% x full rate of each species 50 x 0.5 64 x 0.5	Rye=25 Spelt=32
Rye/Oats/Oilseed Radish	50/40/2	3 way species mix, only 1 species is overwintering	Overwintering species must be 50% of its full rate, others can be 25% each Winter Rye: 50 x 0.5 Oats: 40 x 0.25 Radish: Chart shows 25% rate = 1.5 lb	Rye=25 Oats=10 Radish=1.5

**Figure 1 - Seed Quality Adjustment Table**

Additional Seed Quality Adjustment Factor <sup>1</sup>										
Germination										
	98%	96%	94%	92%	90%	88%	86%	84%	82%	80%
Purity	98%	-	-	-	-	-	1.02	1.04	1.07	1.11
	96%	-	-	-	-	1.01	1.04	1.07	1.10	1.13
	94%	-	-	-	1.01	1.04	1.07	1.09	1.13	1.16
	92%	-	-	1.01	1.04	1.07	1.09	1.12	1.16	1.19
	90%	-	1.01	1.04	1.06	1.09	1.12	1.15	1.19	1.22
	88%	-	1.01	1.04	1.07	1.12	1.15	1.18	1.22	1.25
	86%	1.02	1.04	1.07	1.09	1.12	1.15	1.18	1.21	1.28
	84%	1.04	1.07	1.10	1.12	1.15	1.18	1.21	1.25	1.32
	82%	1.07	1.10	1.13	1.16	1.19	1.22	1.25	1.28	1.35
	80%	1.11	1.13	1.16	1.19	1.22	1.25	1.28	1.32	1.39

1. The “additional seed quality adjustment factor” is to be used only if the percent germination and percent purity is lower than the assumed value. Combinations without numbers (-) do not need an adjustment of the listed seeding rate.

Figure 2 –Seeding Table for Common Cover Crops(See NRCS Appendix A for more information and forage species)

Species	Seeding Rates in Pounds PLS (Percentage of Mix)						Seeding depth (in)	North
	Overwintering <sup>1</sup>	100%	75%	50%	33%	25%		
Winter Rye	Yes	50	38	25	17	13	1	7-15 to 11-1
Winter Barley	Yes	59	44	29	19	15	1	7-15 to 10-22
Winter Wheat (Cover Crop)	Yes	64	48	32	21	16	1	9-22 to 10-22
Winter Triticale	Yes	60	45	30	20	15	1	7-15 to 10-22
Spelt	Yes	64	48	32	21	16	1	9-22 to 10-22
Annual Ryegrass	Yes	18	13	9	6	4	0.5	8-1 to 9-20
Oats	No	40	30	20	14	10	1	8-1 to 9-20
Oilseed Radish	No	NR	NR	NR	1	0.7	0.5	7-15 to 9-15
Rapeseed/Canola/Kale	Yes	4	3	2	1.5	1	0.5	7-15 to 9-15
Turnip	No	2.5	2	1	0.75	0.5	0.25	7-15 to 9-15
Alfalfa (Cover Crop)	Yes	16	12	8	6	4	0.25	8-1 to 8-15
Red Clover	Yes	9	7	5	3	2	0.25	7-20 to 8-30, 2-1 to 5-1
Yellow Sweet Clover	Yes	8	6	4	3	2	0.25	7-20 to 8-30, 2-1 to 5-1
Crimson Clover	Yes	12	9	6	4	3	0.25	6-15 to 9-15
Balansa Clover	Yes	3	2.2	1.5	1	0.8	0.25	6-1 to 9-15
Winter Pea	No	40	30	20	14	10	1.25	7-20 to 9-20
Hairy Vetch	Yes	15	11	8	5	4	1	7-20 to 9-20
Sorghum-Sudangrass	No	24	18	12	8	6	1	5-15 to 8-1
Sorghum	No	5	3.7	2.5	1.6	1.2	1	5-15 to 8-1
Sudangrass	No	20	15	10	7	5	0.75	5-15 to 8-1
Pearl Millet	No	12	9	6	4	3	0.75	5-15 to 8-1
Japanese Millet	No	14	11	7	5	4	0.75	5-15 to 8-1
Teff	No	7.5	5.5	3.8	2.5	1.9	0.125	5-15 to 8-1
Sugarbeet	No	NR	NR	1.3	0.8	0.6	0.75	5-15 to 8-1
Flax	No	NR	NR	9	6	4.5	0.5	7-15 to 8-15
Buckwheat	No	NR	NR	12	8	6	0.75	7-15 to 8-15
Sunflower	No	NR	NR	NR	1.3	1	1.25	5-15 to 8-1
Cowpea	No	60	45	30	20	15	1.25	6-15 to 8-1
Sunn Hemp	No	12	9	6	4	3	0.5	6-15 to 8-1
Faba Bean	No	15	11	8	5	4	1.5	6-1 to 8-1
Berseem Clover	No	10	7.5	5	3.3	2	0.25	5-15 to 8-15
Soybean (Cover Crop)	No	54	40	27	18	13	1.5	6-15 to 8-15

**Important Dates**

The grower must complete the Certification process by January 15th of the enrolled Crop Year.

**Certification Instructions**

1. Log in to the applicable “Grower” account in the *MyFarms* H2Ohio experience.
2. Navigate to the “BMP Certification” milestone and complete the Certification tasks.
3. Once the Certification tasks are completed, the SWCD will review the documents and either release payment or ask for more information.