Name of Practice: VOLUNTARY LEGUME BASED COVER CROP
VACS Program Specifications for No. VWQ-4

This document specifies terms and conditions for the Virginia Agricultural Best Management Practices Cost-Share Program's Voluntary Legume Cover Crop best management practice, which are applicable to all contracts entered into with respect to that practice.

A. Description and Purpose

This practice will improve water quality by providing an adequate residue cover to prevent erosion and serve as desirable mulch for no-till cultivation. Water quality will also be enhanced by the nitrogen fixation of the legume in order to reduce applied amendments.

B. Policies and Specifications

1. Producers must be fully implementing a current Nutrient Management Plan (NMP) on all agricultural production acreage contained within the field on which this practice will be implemented. The NMP must comply with all requirements set forth in the Nutrient Management Training and Certification Regulations (4VAC50-85 et seq.) and the Virginia Nutrient Management Standards and Criteria (revised July 2014); must be prepared and certified by a Virginia certified Nutrient Management Planner; and must be on file with the local District. Plans shall also contain any specific production management criteria designated in the BMP practice (4VACV50-85-130G).

2. No nitrogen and no phosphorus from any sources are allowed between the harvesting of the previous crop and March 1 of the next calendar year. No nitrogen or phosphorus are allowed at planting.

3. The amount of nitrogen application must be reduced following a pure legume cover crop according to Table 7-1, *Estimating Nitrogen Available to Succeeding Crops from Legumes* on page 108 of DCR Nutrient Management Standards and Criteria (Revised July 2014).

4. The amount of nitrogen application must be reduced following a mixed species legume cover crop according to the recommendations of a Nutrient Management Plan. A split application of nitrogen based upon the results of a pre-sidedress nitrate test (PSNT) may be applied as well.

4. Removal of the legume residue by baling or by any other means is not allowed. Grazing is not permitted for this practice.

5. Mulch Cover
   i. Existing stands: An adequate cover (i.e. minimum 60% legume cover and stand composition) that has been planted for at least one year prior to grain planting. Stand can be composed of clover, lespedeza, vetch or alfalfa. Seed must have been inoculated at time of planting.
   ii. New stands: A legume cover crop can be planted during the fall prior to grain planting using the following recommendations.

Type	Rate	Seeding Date
Crimson Clover	20 lbs/acre	by September 28
OR		October 12 for the Coastal Plain
Crimson Clover (with any single grain or single grass below)	10.0 lbs/acre	
1) Annual ryegrass	10.0 lbs/acre	
2) Rye	1.0 bu./acre	
3) Barley	1.0 bu./acre	
4) Oats	1.0 bu./acre	
OR		
Ladino Clover (with either)	2 lbs/acre	
1) Tall Fescue	15.0 lb./acre	
2) Orchard grass	10.0 lb./acre	
OR		
Austrian Winter Pea	30-40 lbs/acre	by October 26
OR		
Austrian Winter Pea (with any single grain or single grass below)	15-20 lbs/acre	
1) Annual ryegrass	10.0 lbs/acre	
2) Rye	1.0 bu./acre	
3) Barley	1.0 bu./acre	
4) Oats	1.0 bu./acre	
OR		
Austrian Winter Pea (with either)	15-20 lbs/acre	
1) Tall Fescue	15.0 lb./acre	
2) Orchard grass	10.0 lb./acre	
OR		
Hairy Vetch	20 lbs/acre	by October 26
OR		
Hairy Vetch (with any single grain or single grass below)	10.0 lbs/acre	
1) Annual ryegrass	10.0 lbs/acre	
2) Rye	1.0 bu./acre	
3) Barley	1.0 bu./acre	
4) Oats	1.0 bu./acre	
OR		
Hairy Vetch (with either)	10 lbs/acre	
1) Tall Fescue	15.0 lb./acre	
2) Orchard grass	10.0 lb./acre	

Vetch is not recommended in rotations containing small grains. It is very important that seeding dates be met to ensure adequate fall growth.

iii. All seed is required to be inoculated.
iv. Method:
  a) No-till drill
  OR
  b) Aerial seeding
  OR
  c) Conventionally drilled, as long as 30% of previous crop residue remain
  OR
  d) Broadcast, as long as 30% of previously crop residue remain

6. Legume cover crop must be left on surface intact to serve as mulch for the no-till planting of grain crops.

7. Soil loss rates must be computed for all applications.

8. The practice must not be in lifespan from any other conservation program.

9. This practice must be implemented on the fields consistent with NRCS Standards 340 Cover Crops. This practice is for use only on land being planted to a grain crop. No-till planting must be established into an existing legume stand or newly established legume stand according to the standards of NRCS 329 Residue and Tillage Management, No-till/Strip-Till/Direct Seed, and 340 Cover Crops.

10. The practice may be certified complete once the grain crop has been planted using no-till methods into the legume mulch cover and all applicable specifications listed above have been met.

C. Technical Responsibility

Technical and administrative responsibility is assigned to qualified technical DCR and District staff in consultation, where appropriate and based on the controlling standard, with DCR, Virginia Certified Nutrient Management Planner(s), NRCS, DOF, and VCE. Individuals certifying technical need and technical practice installation shall have appropriate certifications as identified above and/or Engineering Job Approval Authority (EJAA) for the designed and installed component(s). All practices are subject to spot check procedures and any other quality control measures.

Nitrogen Reduction Form for VWQ-4 Certification

District Name: _____

Printed Applicants Name:_____

Applicants Address: _____

		Nitrogen Reduction
Fields	Acreage	(lbs/ac)
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

I hereby certify that the above information relating to nitrogen reduction from my normal or recommended application rates is true and correct.

_____ (Applicant's Signature)

_____ (date)