

COSAQUE BLACK WINTER OAT VARIETY

Developed in Kentucky 2008



- Excellent mid fall/early winter planted forage crop with partial overwintering grazing option and or haying in May.
- High Relative Feed Value Forage
- High Forage Yields
- COSAQUE demonstrates higher commercial productivity than other black oats
- Non-Invasive as compared to ryegrass
- Tolerant of lower pH soils (5 to 6)
- Good entry crop for beans or corn
- Narrowest Carbon:Nitrogen ratio of all small grain straw makes “COSAQUE” an excellent cover crop for building and subsequent mineralization of soil organic matter
- High Biomass delivers excellent suppression of fall and spring germinating weed species
- Cover crop of choice for over 20 years in South America
- COSAQUE is available only as Certified seed for Quality Control Purposes



COSAQUE is a Black Hulled Variety of Oats
Species: *Avena sativa*



For more information please contact: Brian Caldbeck (270) 316-4316

Email: brian.caldbeck@caldbeckconsulting.com

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Yield and Forage Quality of Cosaque Black Oats at Early Heading Stage

Dry Matter (DM) Yield*	4.53 ton/ac
Relative Forage Quality	166.9
Total Digestible Nutrients (DM)	65.6%
Net Energy of Lactation (DM)	0.675 MC/lb
Net Energy of Maintenance (DM)	0.732 MC/lb
Net Energy of Gain (DM)	0.405 MC/lb
Metabolizable Energy (DM)	1210 KC/lb
Crude Protein (DM)	19.3%
Crude Fiber Est. (DM)	25.1%
Neutral Detergent Fiber (DM)	53.4%
Acid Detergent Fiber (DM)	26.12%
Lignin (DM)	3.85%
Non-fibrous Carbohydrates (DM)	21.14%
Nitrates (DM)	1032 ppm

* Average of DM yields in Central TN and North GA

Analysis by Feed and Environmental Water Laboratory, GA



Carbon and Nitrogen Sequestration Study with COSAQUE Southern Kentucky 2015

COSAQUE oats were seeded in southern Kentucky as a cover crop in early fall 2015. Two 8" rows of oats were planted between 30" corn rows, which effectively meant seeding ~53% of the field. The table below displays data gathered from four 12" x 8" x 6" sections of the field on December 18th, 2015.

Plant Part	Dry Biomass lbs/ac	%C	%N	C:N	C lbs/ac*	N lbs/ac*	Sequestered CO ₂ tons/ac*
Above Ground	4580.4	42.0	2.6	16:1	906.1-1927.9	57.7-122.8	1.7-3.5
Below Ground	1576.1	13.8	0.7	20:1	83.7-178.2	4.4-9.4	0.2-0.3

* C, N, and sequestered CO₂ numbers are calculated on both 53% coverage and 100% coverage estimate.

Analysis by Midwest Laboratories Inc. NE

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