540.67 Example of a Study Plan for the Plant Materials Program

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
STUDY PLAN

Study ID Code	IDPMC-P-0601-CP
Title	Controlling erosion on cropland with cover cropping and residue management systems in the arid, semiarid and summer dry parts of the US.
National Project No.	Cropland 1.1
Study Type	Comparative Evaluation
Study Status	Active
Location	IDPMC
Study Leader	Derek Tilley, IDPMC
Duration	2006 through 2010
Cooperators	University of Idaho, Aberdeen Experiment Station
Land Use	Cropland Hayland
Vegetative Practices	Primary 340 COVER AND GREEN MANURE CROP Secondary 512 PASTURE AND HAYLAND PLANTING
Resource Concern(s)	Resource — Consideration/Problem Soil — Soil erosion, wind Water — Water quality, surface water contaminants, suspended sediment
Long Range Plan	Study falls under Part II, Item 3 of the IDPMC LRP
Description	Commercially available cultivars of a wide variety of plants will be assembled and tested. Some will be replicated and some not. The material will include grasses and legumes. Plantings will be made at four different times during the year to measure the effectiveness of the plants for use as cover crops in a variety of cropping systems.
Status of Knowledge	Many of the cultivars selected for this study are well documented as cover crops in other regions of the country and/or for use in different seasons of the year. Some of the cultivars are agronomic crops in other regions and may function in this region as cover crops. Most if not all of these cultivars have well documented performance during a single season, and we will be testing them in different seasons. Our knowledge of these cultivars for this use, in these seasons, in Idaho climate is very limited. However, we have sufficient confidence in some of them that we will replicate the plots based on an assumed level of survival.

Experimental Design	Randomized Complete Block Design
Treatment 1	Title: Accession Description: Cultivars Planted
Materials and Methods	Samples of seed will be assembled from Plant Materials Centers, University researchers, and Commercial sources. Seed will be assembled beginning in January 1996. Those with high potential will be seeded in replicated plots 160 inches wide and 33 ft long. Row spacing will be 10 inches, and seeding rates will vary by seed size, with 20 seeds per foot for large seeds, (<100,000 per lb), 30 seeds per foot small seeds, (>500,000 per lb). Planting equipment will be a Tye double disk drill. The design will be a Randomized Complete Block, RCB. 6 accessions will be replicated three times at each of three planting dates. The three planting dates are planned for early spring, late spring, and late fall
Final Evaluations	Field Plantings will be installed in each of the MLRAs found in Idaho to test regional adaptation of materials tested at the PMC
Technology Transfer Products	TechNotes, revise FOTG standards, Current events article
Literature Cited	PMC release documentation, Commercial literature, University research results
Keywords	Cover crops, new species and cultivars, pasture land, hayland, Idaho
Reviewed by:	Plant Materials Specialist, Idaho _____
Approvals:	State Conservationist, Idaho _____