

TECHNICAL NOTES

U S Department of Agriculture

Soil Conservation Service

TN - Plant Materials - 35

March, 1994

"TESTING PLANT MATERIALS & CULTURAL METHODS IN THE FIELDII

Our Plant Materials Program seems to be a program that is not well understood by many people. Have you ever been involved in a field planting, advanced evaluation planting or conservation field trial? If you have, you do know that SCS has a Plant Materials Program and how it can assist you in your local conservation work. These types of plantings or trials are discussed further in the National Plant Materials Manual.

The above types of plantings are basic to the plant materials program, so let's define these to make them more relevant to your conservation job:

Advanced Evaluation Planting (AEP) - This is usually a small randomized replicated plots of one or more plants established at a selected location with known soil and climate* conditions. Plants or cultural methods are tested. This planting is an extension of the PMC testing of plants and the PMC Manager has prime responsibility for this work. These plantings can be conducted on or off the PMC. The State PM Specialist provides technical direction for this work.

Another name used in the past for these plantings was Field Evaluation Plantings (FEPs) . These are initiated by the Plant Materials Center Manager who directs the establishment, management and evaluation of these plots. Local FOs become involved in the location and evaluation of these plots. These plantings provide the data to determine the future development and testing of a plant or method. This data is entered into a database and published in periodic reports. At this stage, we may drop a plant from further testing due to performance. In general, these *plantings are* more regional and very detailed information is gathered to document performance.

Field Planting(FP) - The final evaluation of a promising new or unproven plant or cultural and management methods under actual use conditions and in comparison to a standard plant or method on various soil, climate and land use conditions. They should be

of a size that permits normal use and management. In some instances, this can be a demonstration of known plants or methods to provide a spread of practice or use. The local DC has prime responsibility for this planting. The State PM Specialist directs the establishment and evaluation of these plantings. Periodically this data is summarized for technical transfer to the field.

This type of planting is where most FOs can get involved. The State PM Specialist develops a work plan for field plantings which lists plants needing evaluation and a procedure for requesting seed or plants. Many times this type of planting may assist in solving or demonstrating the use of a plant or cultural or 'management method which has been addressed in the local RCD long range or strategic plan. Data collected is entered into a database and used to document the further use and release of this plant for commercial production. Field Plantings can be established on private, county, state or federal lands that have the required soils and use conditions for proper evaluation. These are formally approved by the local RCD.

Conservation Field Trial(CFT) - A planned field study to examine the adequacy or adaptability of a conservation practice, procedure or material for solving local soil, water or related resource problems. A primary tool to introduce, develop and transfer technology. A work plan is required and must be approved by the State Conservationist. Funds can be allocated to assist in the implementation of the trial. Work can involve various agencies and disciplines. New and unproven plants are not tested under this type of trial. The local DC is responsible for administering the CFT.

This trial can be instigated at the local FO level, but will require input from appropriate discipline specialists in development of the plan. The State PM Specialist may not have direct input into CFTs because they can involve other than plant or plant-related techniques as engineering. Cultural methods, such as establishing native, wetland plants, can be studied to determine the best establishment method. In regard to native plants, the establishment and management techniques will be key in their future use and survival.

If you have any further questions, contact the Resource Technology Staff.

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