

# TECHNICAL NOTE

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USDA NATURAL RESOURCES CONSERVATION SERVICE PACIFIC ISLANDS AREA

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## Plant Materials Technical Note 9

### ESTABLISHING FIELD PLANTINGS

#### INTRODUCTION

There are many entities that visit our NRCS Field Offices in search of assistance when addressing resource concerns. Consequently, NRCS Field Offices are routinely in contact with farmers, ranchers and other land managers of local conservation districts who show interest in looking at new plants and technology to address resource concerns. The Plant Materials Program depends on this interaction to connect with cooperators who are willing to field test new plant selections and plant technology. The Plant Materials Center (PMC) refers to these field tests as Field Plantings.

Field Plantings are relatively small (0.25 acre) plantings, typically non-replicated, used by the PMC to assess the potential of new plant materials and plant technology under actual field conditions (cooperator installed with cooperator-owned equipment) and under a variety of soil, climatic, and land-use conditions within the PMC service area.

Field Plantings are beneficial in a number of ways. Primarily, they are used by the PMC as a final evaluation of selected plants and plant technologies or as a comparison study of known cultivars/varieties. Conservation planners may also use Field Plantings to test new or untried plants and plant technologies in their service areas. Additionally, commercial producers can use Field Plantings to test plants and plant technology on a small scale before investing in a large-scale planting. Furthermore, Field Plantings can serve as demonstrations so others who are interested can get a hands-on feel of what to expect. The following are procedural requirements for establishing Field Plantings to ensure efficiency, quality and good record keeping.

#### FIELD PLANTING ESTABLISHMENT PROCEDURES

##### Field Planting Requests

Field Plantings are the responsibility of the Plant Materials Specialist (PMS). The PMS collaborates with the Area Plant Materials Committee to develop the Plant Materials Long Range Plan (LRP) based on the needs of the Field Offices. The LRP is used as a guide to develop the yearly PMC Business Plan. The PMC Business Plan defines Field Planting establishment numbers, location, management techniques, timing and duration of evaluations, standards for comparison, evaluation responsibility, and data collection and analysis. Each year, the PMS will release a bulletin, based on the PMC Business Plan, requesting Field Planting plans for consideration from Field Offices. It is the responsibility of the PMS to assure

that conservation planners are up to speed with the latest PMC Business Plan and Field Planting bulletin so planners are able to solicit cooperators who may be interested in participating in the Field Planting process. The conservation planner may also request to test a new or untried plant or plant technology that is not covered in the PMC Business Plan. Ultimately, it is the conservation planner who must work with the interested cooperator to submit a Field Planting request. Requests for Field Plantings must be submitted to the PMS by email so the entire process can be documented. The PMS will then decide if a Field Planting is warranted.

### **Initiating a Field Planting Plan**

A Field Planting plan is initiated with form NRCS-ECS-9, which can be obtained by contacting the PMS. It is imperative that cooperators fully understand their responsibilities to a Field Planting. These include, but may not be limited to: providing a test site; thorough site preparation; procuring plant materials; planting; fencing; and allowing evaluations over the life of the field planting. The size of Field Planting should be such that it permits normal use and management and usually limited a half acre or smaller at the discretion of the PMS and PMC. The NRCS-ECS-9 forms the basis of the database record and is used in plant release documentation and to develop recommendations.

### **Submitting a Field Planting Plan for Approval**

Field Planting plans can be submitted at any time during the year. Once the NRCS-ECS-9 form is completed it must be submitted for a series of approvals. The conservation planner must first submit the plan to the Local Conservation District. Once the Conservation District approves the Filed Planting, it is submitted to the PMS for approval. The PMS will review the plan to assure that it coincides with the Plant Materials LRP and PMC Business Plan and that planting material is available. Plans that are not approved can be amended and resubmitted with changes that have been recommended by the PMS. Re-submitted Field Planting plans need to be re-approved by the cooperator and Conservation District.

In some instances, a Field Planting plan that is not in-line with the Plant Materials LRP may be approved by PMS/PMC Manager based upon the usefulness of the planting and availability of material. Once a Field Planting plan is approved by the PMS, plant materials can be requested/acquired from the PMC.

### **Acquiring Plant Materials**

An approved Field Planting plan serves as an official request of plant materials from the PMC. The PMS arranges for the plant materials provided by the PMC to be shipped to the Field Office or directly to the cooperator. If the plant material proposed for testing is not available at the PMC, the center will purchase the materials from a commercial source using NRCS (CTA) funds. It is very important to understand that the standard of comparison plant material is normally provided by the cooperator. Seed requests should be made well ahead of the planned planting date.

### **Equipment / Site Preparations / Installation**

Installation of the Field Planting must follow the approved plan. The cooperator is responsible for providing all seedbed preparations, seeding implements, and tractor equipment required for installation of the Field Planting. Also, before installing the Field Planting, the Planting and Site Information form, which is obtained by contacting the PMS, must be completed. Seedbed quality has a significant influence on the establishment of plantings, so it is best to complete this evaluation at the time of planting.

## **Maintenance**

A follow-up Maintenance Plan is normally not required, but at times may be needed. On the other hand, a Demonstration Field Planting requires a maintenance plan and a cooperater who is committed to carrying it out.

## **Evaluation**

The PMS will send out evaluation forms for all active Filed Plantings. In most cases, evaluations are conducted by the Field Office where the Field Planting originated. The PMS will participate in evaluations upon request for assistance by the Field Office. Evaluations are typically conducted annually for the first 3-5 years and then only every 3-5 years thereafter. Once all the information considered of value has been obtained, the planting is terminated and no longer evaluated.

## **Duration**

Typically, Field Plantings will run for a period of 5-10 years, but may run up to 15 years, as with woody Field Plantings. However, the cooperater may terminate the Field Planting at any time and for any reason. Plants that die within the duration of the Field Planting can be replaced at the cooperater's discretion.

## **Technology Transfer**

Field plantings are just one component of an ongoing effort by the Plant Materials Program to provide plant technology to the Field Office to assist in putting conservation to the ground.

By implementing Field Plantings in a variety of real-life situations, a better understanding of potential conservation benefits is achieved. The PMS uses the information gained from Field Plantings to develop plant technologies in the form of technical notes, plant guides and also plant releases that are not only utilized by Field Offices, but all who are concerned with resource conservation.

## **REFERENCES**

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