Nematode sampling instructions for cotton producers on the Southern High Plains of Texas

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Soil sampling is important in determining populations of plant parasitic nematodes capable of reducing yield. Nematode samples are typically taken after harvest (November through February); however, samples collected prior to harvest may give the best estimation of nematode populations. In collecting soil samples, several factors, such as sampling method(s), sample preparation and handling and field conditions must be must be taken into consideration.

Several methods can be used in obtaining soil samples. Samples should be collected following a random, crossing, or zig-zag pattern (Fig. 1). A total of three composite samples (from 1/3 of the field each) should be collected per field. Additional samples may be required if dealing with different soil types in a field. A composite sample consists of 15 to 20 soil cores taken from a depth of 12-inches using a soil probe, or a narrow bladed shovel. Samples should be taken within a 4 inch radius of the taproot, as it is important to have root fragments present in the sample. The soil cores should be placed in a bucket and thoroughly mixed being sure that any dirt clods are broken-up. A sub-sample of 1-quart should be placed in a sealed plastic storage bag. Nematode samples need to be kept cool (*not frozen*), and out of direct sunlight. In addition to the collection and handling of samples, field conditions at the time of sampling may impact test results. Close attention should be paid to the amount of soil moisture at sampling. Samples should not be taken if soil moisture is too wet or too dry. Samples should be sent to a qualified laboratory capable of making microscopic evaluations in order to determine populations. For additional information contact your local Extension personnel.

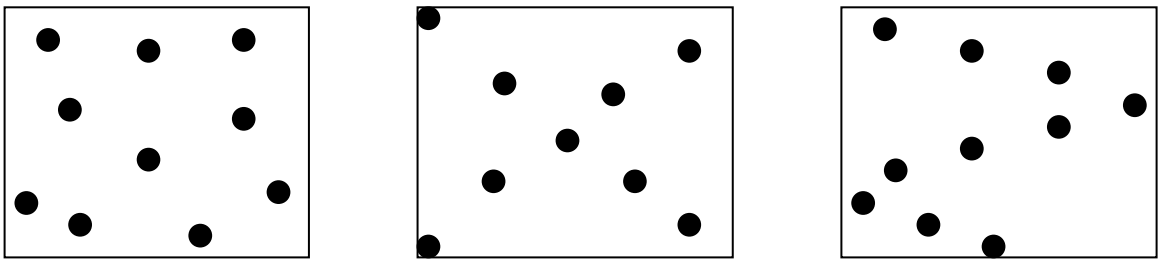

Figure 1. Sampling patterns used to determine nematode populations in soil. Left) random, Middle) crossing or X and Right) zig-zag patterns.