AGENT: Keep bottom copy

COUNTY__________________

COLLECTION DATE_______

Plant Diagnostic Checksheet
Plant Diagnostic Laboratory
Extension Plant Pathology
Extension Agronomy
4032 Throckmorton Hall
Kansas State University
Manhattan, KS 66506-5504
Phone (785) 532-5810

Lab. No.__________________
Received__________________
Condition on arrival__
Excellent Fair Good Poor

FOR LAB USE ONLY

SUBMITTED BY
(Agents – name is sufficient) ____________________________
CITY, STATE, ZIP ___________________________________________________________________
PHONE # ___________________________________________________________________________
E-MAIL ___________________________________________________________________________

SUBMITTED FOR
STREET ADDRESS ______________________________________________________________________
CITY, STATE, ZIP ______________________________________________________________________
PHONE # ___________________________________________________________________________
E-MAIL ___________________________________________________________________________

Sample from
_____ Farmer
_____ K-State Faculty
_____ Consultant/Ag. Business
_____ Other government personnel
_____ Commercial Horticulture
_____ Homeowner

PLANT ______________________ Location _____ field _____ commercial interiorscape
Cultivar _____________________
Acreage/# affected __________
Date planted ________________

SYMPTOMS PRESENT:
_____ Wilt
_____ Yellowing
_____ Scorch
_____ Leaf Mottle or Mosaic
_____ Tip Die Back
_____ Galls
_____ Stunting
_____ Fruit Rot
_____ Abnormal or Twisted Growth
_____ Canker
_____ Leaf Spot
_____ Root Rot
_____ Premature Leaf Fall
_____ Other__________

Date symptoms first appeared ______________ Have you had this problem before? ______________________

OTHER INJURIES:
_____ Hail
_____ Wind
_____ Freeze or frost
_____ Sun
_____ Insects: ________________________________

DISTRIBUTION OF DISEASE:
_____ One or few plants
_____ Spots or patches
_____ Edge of field only
_____ Upland, dry areas
_____ Low, wet areas
_____ Shaded areas
_____ Entire crop

Weather last two weeks ________________________________

Watering or Irrigation:
_____ Furrow
_____ Overhead
_____ Trickle
_____ None
_____ How Often: __________________

CHEMICALS APPLIED TO CROPS (rate and type of application):

Soil:
Type__________________________ pH__________________________
Drainage: Good Moderate Poor

Last two crops planted on this site ________________________________

COMMENTS:
These guidelines should be followed for all types of plant samples.

1) Fill out the accompanying Plant Diagnostic Checksheet as completely as possible.
2) Send a plentiful amount of FRESH plant material, it is best to include the entire plant when possible. Dig (do not pull) up the plant and ship as soon as possible.
3) Send a sample characteristic of the problem that exhibits a range of symptoms.
4) **DO NOT ADD WATER OR WET PAPER TOWELS TO THE SAMPLE!**
5) Seal the plant material in a plastic bag and pack in a crush-proof container.
6) Send only one type of sample in each bag.
7) Send information in a separate plastic bag.
8) Include necessary payment with sample.
9) Send samples on or before Wednesday in order to avoid weekend storage at the post office.

### SPECIFIC COLLECTION GUIDELINES

(All samples should be sent in a plastic bag with a few air holes cut in it).

**Crops/Annual plants:** Send entire plants, including roots and soil. Carefully dig the plants up. Send several plants showing a range of symptoms. Seal the roots in a plastic bag and place the entire sample in a larger plastic bag. **DO NOT ADD WATER.**

**Tree wilt diseases:** Collect several branches ½ to 1 inch in diameter and about 12 inches long. The samples should be in the process of wilting but not dead.

**Trees/shrubs** (foliage diseases, cankers, and fruit rots): Collect several branches 10-12 inches long (or fruit) showing a range of symptoms.

**Turf:** Samples should be 6 inches square by 4 inches deep. Collect the sample near the margin of the affected area so that a range of diseased and healthy tissue is included.

### NEMATODE COLLECTION GUIDELINES

- **Diagnostic sampling for initial detection of a nematode problem:** Separate samples from healthy and affected areas are essential for a reliable diagnosis of nematode damage. Collect several soil and root cores to a depth of 6 to 8 inches from the margin of the affected area. The soil cores should be bulked, mixed, and subsampled. Repeat the sampling process nearby in the healthy area. Submit 1 pint of soil and roots. Include the plants if possible.

- **Advisory sampling for management purposes (for soybean cyst):** Collect samples prior to planting. Divide the field into sections based on soil type and cropping history. From each section collect at least five soil cores taken at a depth of 6 to 8 inches. The soil cores should be bulked, mixed, and subsampled. Submit 1 pint of soil.

- **Sampling for pine wilt:** Collect a branch at least 2 inches in diameter and 6 to 8 inches long from adjacent to the trunk of the tree. Place sample in plastic bag immediately after collection and keep cool until shipping. Do not add water to the sample. Mail early in the week (Monday – Wednesday).

- **Allow 1-2 weeks for a reply.**