

**Note:** Please complete this form in its entirety to identify the soil sample location. The information will be used to compile a distribution map of clubroot infestations in North Dakota.

	_ Grower's name	e:		_ Phone: _		
			(will remain confidential)			
			Field Identity			
Latitude N	Longitude W (-)	OR	Township	Range	Section	1⁄4
	Latitude N	Grower's name Latitude N Longitude W (-)	Grower's name:         Latitude N       Longitude W (-)       OR         Image: Strategy of the strategy	Grower's name:	Grower's name: Phone: (will remain confidential)	Grower's name: Phone: (will remain confidential)           Example         Field Identity           Latitude N         Longitude W (-)         OR         Township         Range         Section           Image: Im

Latitude and longitude in decimal degrees is preferred.

**Example:** *N: 48.659444 W: 98.24444 (GPS coordinates) -* GPS coordinates can be obtained through "preferences" or other "setup" functions within the systems software.

## **Soil Sampling Survey Procedure**

1. Walk in a "W" pattern in the field starting from the main entrance of the field (approach), low spots or flooded areas, low pH spots and areas of diseased patches as shown in the figure below.



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- 2. At each sample point, clear away residue on the soil surface and collect soil core or scoop from the top 3 to 6 inches (a representative sample is five scoops or cores from each field). Be sure to maintain 300 feet from point to point of soil collection.
- 3. Air-dry the soil samples indoors in paper boxes and send or drop them off at one of the following address:

#### Zhaohui Liu

Department of Plant Pathology NDSU Department 7660 P.O. Box 6050 Fargo, ND 58108-6050

#### UPS/FEDEX to Zhaohui Liu

Department of Plant Pathology Walster Hall 306 Fargo, ND 58102

### Venkat Chapara

Langdon Research Extension Center 9280 107th Ave. N.E. Langdon, ND 58249

North Dakota State University, Fargo, North Dakota



Figure 1. Clubroot on canola. (Venkat Chapara, NDSU)



Figure 2. Canola field infected with clubroot in patches. (Venkat Chapara, NDSU)

Figure 3. Canola fields with clubroot in North Dakota identified from years 2016 to 2019. (Knodel, Hongang and Chapara, 2019)





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