## *Section 1: General Information*

1) Please answer the following for last year:

a) How many total acres did you farm? _____ac.

b) How many acres were devoted to sweet corn? _____ac.

c) How much marketable sweet corn did you produce? _____ [] doz ears, [] ears, [] tons

d) Approximately what percentage of your sweet corn was sold in each of the following markets?

fresh market wholesale _____ % fresh market retail _____ % processing _____ %

e) When did you first plant and harvest sweet corn?

First planting date: _____ Last planting date: _____

First harvest date: _____ Last harvest date: _____

2) What level of yield can you expect to achieve in a normal year (per acre)? _____ [] doz ears, [] ears, [] tons

3) What is your ZIP code? __ __ __ __ __

4) Do you consider yourself an IPM grower? [] Yes [] No

5) Please indicate how important each of the following considerations are to you when choosing pesticides:

| *Item* | *Importance* |
|---|---|
| effectiveness of the pesticide | [] not important [] somewhat important [] very important |
| impact on ground and/or surface water | [] not important [] somewhat important [] very important |
| cost | [] not important [] somewhat important [] very important |
| availability of chemicals (e.g. leftover from other crops) | [] not important [] somewhat important [] very important |
| safety of workers | [] not important [] somewhat important [] very important |
| impact on beneficial insects | [] not important [] somewhat important [] very important |
| impact on other non-target organisms (e.g. birds fish) | [] not important [] somewhat important [] very important |

7) Who applied most of your pesticides on sweet corn fields last year?

[] self, partner or family member [] employee

[] commercial pesticide applicator [] other (specify) _____

[] no pesticides were applied

*8)* Who did most of the pest scouting on your sweet corn fields last year?

[] self, partner or family member [] an employee or paid scout

[] commercial pesticide applicator [] other (specify) _____

[] sweet corn fields were not scouted

## *Section 2: Pests*

Please provide your best estimate of how severe each pest was over the past year on your farm relative to your perception of the average severity on the average Massachusetts sweet corn farm. Enter a number from 0 to 3, where:

**0** - indicates the pest was completely absent

**1** - indicates the pest population was relatively low,

**2** - indicates the pest population was moderate or average and,

**3** - indicates the pest population was relatively high.

| Pest | Severity |
|---|---|
| Insects | Less ←→ More |
| European Corn Borer | [] 0 [] 1 [] 2 [] 3 [] don't know |
| Corn Earworm | [] 0 [] 1 [] 2 [] 3 [] don't know |
| Fall Armyworm | [] 0 [] 1 [] 2 [] 3 [] don't know |
| Corn Flea Beetle | [] 0 [] 1 [] 2 [] 3 [] don't know |
| Corn Leaf Aphid | [] 0 [] 1 [] 2 [] 3 [] don't know |
| Corn Rootworm | [] 0 [] 1 [] 2 [] 3 [] don't know |
| Seed Corn Maggot | [] 0 [] 1 [] 2 [] 3 [] don't know |
| Cutworms | [] 0 [] 1 [] 2 [] 3 [] don't know |
| Sap Beetles | [] 0 [] 1 [] 2 [] 3 [] don't know |
| Weeds | Less ←→ More |
| perennial weeds | [] 0 [] 1 [] 2 [] 3 [] don't know |
| annual broadleaf weeds | [] 0 [] 1 [] 2 [] 3 [] don't know |
| annual grasses | [] 0 [] 1 [] 2 [] 3 [] don't know |
| Diseases | Less ←→ More |
| Stewart's Wilt | [] 0 [] 1 [] 2 [] 3 [] don't know |
| Smut | [] 0 [] 1 [] 2 [] 3 [] don't know |
| Anthracnose | [] 0 [] 1 [] 2 [] 3 [] don't know |
| Maize Dwarf Mosaic | [] 0 [] 1 [] 2 [] 3 [] don't know |
| Seed Rot | [] 0 [] 1 [] 2 [] 3 [] don't know |
| Northern Corn Leaf Blight | [] 0 [] 1 [] 2 [] 3 [] don't know |
| Rust | [] 0 [] 1 [] 2 [] 3 [] don't know |

A list of common sweet corn pesticide formulations is attached for reference

While completing this section, please think about a **typical sweet corn planting** last year on your farm. Next, provide information on each pesticide application by indicating the pesticide products you used and the rate at which they were applied.

## Herbicides

| # of IDENTICAL Applications | Product Used | Formulation | Application Method | Rate (per acre) |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

## Insecticides (please include soil insecticides)

| # of IDENTICAL Applications | Product Used | Formulation | Application Method | Rate (per acre) |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

## *Fungicides*

| # of IDENTICAL Applications | Product Used | Formulation | Application Method | Rate (per acre) |
|---|---|---|---|---|
| | | | | |
| | | | | |

Please indicate (with a 2) which of the following statements are true about your sweet corn management practices last year.

Corn stubble was turned under or harrowed before planting

Sweet corn was rotated with other crops.

A winter cover crop was used for weed control.

Sprayers were calibrated at the start of the season.

Separate sprayers were used for insecticides and herbicides.

Sprayer calibration was checked at least once during the season.

A boom sprayer with double drop nozzles was used where coverage of the ear zone was desirable.

When a mist blower was used for ear zone coverage, blocks were not more than 12 rows wide.

Records of planting and harvest dates of treated fields were maintained by block.

Pesticide coverage of target and non-target areas was tested using water sensitive spray cards.

corn earworm (CEW) populations were monitored using pheromone traps

European corn borer (ECB) populations were monitored using pheromone traps

fall armyworm (FAW) populations were monitored using pheromone traps

Insecticides applied to control corn earworm (CEW) corresponded to recommended thresholds

Insecticides applied to control European corn borers (ECB) corresponded to recommended thresholds

Insecticides applied to control fall armyworm (FAW) corresponded to recommended thresholds

Other insect pests for which thresholds are not available, were treated only after scouting.

Floating row covers were used in early corn through the whorl stage to inhibit ECB.

Insects were successfully kept below the economic injury level through non-chemical means such as biological insecticides (e.g. B.t.'s) or beneficial insects on part of the sweet corn acreage.

Sweet corn fields were scouted for weeds during the previous season and a weed map was created.

Weeds were controlled by cultivation and no herbicide was applied.

Herbicide rates were reduced through banding of herbicides and cultivation.

Herbicide rates were reduced through delayed application of reduced rates of the herbicide(s).

Weeds in fields, alleys and roadways were prevented from going to seed.

Tolerant/resistant varieties were used to control Stewart's wilt or maize dwarf mosaic virus (MDMV)

## *Common Pesticide Formulations for Sweet Corn*

The following tables list some insecticide, herbicide and fungicide formulations commonly used on sweet corn. This list is provided for reference only and is not intended to be exhaustive – if you used a pesticide that is not in the tables, please list it anyway. ('Usual rates' are not intended to be prescriptive.)

**Table 1: Common Herbicide Formulations**

| Trade Name | Common Name | Usual Rate per Acre |
|---|---|---|
| 2,4-D Amine | 2,4-D | 0.5 - 4 pt |
| Aatrex, atrazine (4L) | atrazine | 2.4 - 4 pt |
| atrazine (4FL) | atrazine | 1 - 1.5 qt |
| atrazine (WDG,90DF) | atrazine | 1.3 - 1.8 lb. |
| Banvel (WS) | dicamba | 0.5 - 1 pt |
| Basagran | bentazon | 1.5 - 2 pt |
| Bicep (II) | atrazine + metolachlor | 2.4 - 3 qt |
| Bicep (II - Lite) | atrazine + metolachlor | 2.4 - 3.5 qt |
| Bladex (4L) | cyanazine | 2 - 3 qt |
| Bladex (90 DF) | cyanazine | 0.6 - 0.8 lb |
| Bullet | alachlor+atrazine | 2.5 - 4.5 qt |
| Dual (II) | metcachlor | 1.5 - 3 pt |
| Dual (8E) | metcachlor | 1.5 - 3 pt |
| Eradicane (6.7-E) | EPTC | 4.75 - 7.33 pt |
| Eradicane (25-G) | EPTC | 16 - 24 lb |
| Extrazine II (4L) | cyanazine + atrazine | |
| Extrazine II (DF) | cyanazine + atrazine | |
| Frontier (6.0) | dimethenamid | 16 - 32 fl oz |
| Gramoxone Extra | paraquat | 1.5 - 3 pt |
| Laddock (5L) | bantazon+atrazine | 1.3 - 2.3 pt |
| Lasso | alachlor | 2 - 4 qt |
| Microtech | alachlor | 2 - 4 qt |
| Partner (WDG) | alachlor | 2 - 4 qt |
| Prowl (3.3EC) | pendimethalin | 1.8 - 4.8 pt |
| Princep (4L) | simazine | 4 - 8 pt |
| Sutan+ (6.7-E) | butylate | 4.75 pt |

**Table 2: Common Insecticide Formulations**

| Trade Name | Common Name | Usual Rate per Acre |
|---|---|---|
| Ambush 2E | permethrin | 6.4 – 12.8 fl oz |
| Ambush 25W | permethrin | 6.4 - 12.8 oz |
| Asana XL | esfenvalerate | 2.9 – 5.8 fl oz |
| Aztec 2.1G | tebupirimphos + cyfuthrin | 5.5 – 7.3 lb |
| Baythroid 2EC | cyfluthrin | 0.8 – 2.8 fl oz |
| Counter 15G | terbufos | 8 oz / 1000 ft. row |
| diazinon 14G | diazinon | 21 – 28 lb |
| Force 3G | tefluthrin | 4 – 5 oz / 1000 ft row |
| Fortress 2.5G | chlorethoxyfos | 6 oz / 1000 ft row |
| Furadan 4F | carbofuran | 1 – 2 pt |
| Karate 1E | lamda-Cyhalothrin | 2.5 - 3.8 fl oz |
| Lannate SP | methomyl | 0.3 - 0.5 lb |
| Lannate LV | methomyl | 1 - 1.5 pt |
| Larvin 3.2 | thiocarb | 20 - 30 fl oz |
| Lorsban 4E | chlorpyrifos | 2 – 6 pt |
| Lorsban 15G | chlorpyrifos | 6.7 - 13.5 lb |
| Metasystox-R SC | oxydemeton-methyl | 1.5 – 2 pt |
| Penncap-M | methyl parathion | 2 - 4 pt |
| Pounce 1.5G | permethrin | 6.7 - 13.3 lb |
| Pounce 3.2EC | permethrin | 4 - 8 oz |
| Pounce 25WP | permethrin | 6.4 - 12.8 oz |
| Sevin 4F,XLR | carbaryl | 1 - 3 pt |
| Sevin 50W | carbaryl | 1 - 3 lb |
| Sevin 80S,80WSP | carbaryl | 0.7 - 1.9 lb |
| Sevin Bait 5% | carbaryl | 40 lb |
| Thiodan 3EC | endosulfan | 1.33 – 2 qt |
| Warrior 1E | lamda-Cyhalothrin | 2.5 - 3.8 fl oz |