

Table 2. European corn borer second generation: cost-benefit analysis of management.

Example

| | | | |
|----|-----------------------------------|------------------------------------|-------------------------------------|
| 1. | 0.3 egg masses per plant* | × 4.5 borers per egg mass | = 1.35 borers per plant |
| 2. | 1.35 borers per plant | × 0.04% yield loss per borer** | = 0.05% yield loss |
| 3. | 0.05% yield loss | × 140 expected yield (bu/acre) | = 7 bu/acre loss |
| 4. | 7 bu loss per acre | × \$2.40 price per bushel | = \$16.80 loss per acre |
| 5. | \$16.80 loss per acre | × 80% control | = \$13.44 preventable loss per acre |
| 6. | \$13.44 preventable loss per acre | - \$10.00 cost of control per acre | = \$3.44 profit (loss) per acre |

* Cumulative counts taken 5 to 7 days later can be added here.

** Use 0.04 for pollen-shedding corn, 0.03 if kernels are initiated.

You fill in the blanks

| | | | |
|----|--------------------------------|---------------------------------|-------------------------------------|
| 1. | ____ egg masses per plant* | × 4.5 borers per egg mass | = ____ borers per plant |
| 2. | ____ borers per plant | × ____% yield loss per borer** | = ____ % yield loss |
| 3. | ____ % yield loss | × ____expected yield (bu/acre) | = ____ bu/acre loss |
| 4. | ____ bu loss per acre | × ____price per bushel | = \$ ____ loss per acre |
| 5. | ____ loss per acre | × 80% control | = \$ ____ preventable loss per acre |
| 6. | ____ Preventable loss per acre | - ____ cost of control per acre | = \$ ____ profit (loss) per acre |

* Cumulative counts taken 5 to 7 days later can be added here.

** Use 0.04 for pollen-shedding corn, 0.03 if kernels are initiated.