**Cauliflower: IPM Checklist**

**Editor’s Note:** How much progress can you make toward full implementation of IPM in your operation? This checklist suggests IPM practices you might apply. To use the checklist, give yourself full or partial credit for each practice you complete by writing in a point score for each, then tallying your total. Compare your score to the maximum potential points listed in the first column. How does this year’s total compare to last year? Which practices will you implement next year? Use the blank lines to describe IPM practices you develop, or those specific to your region.

<table>
<thead>
<tr>
<th>Maximum Potential Points</th>
<th>Actual Points Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use certified, hot-water treated seed to reduce Alternaria leaf spot, black rot, blackleg or use seed tests to determine if seed is infected.</td>
<td>20 ________</td>
</tr>
<tr>
<td>Use insecticide application for cabbage maggot control only when fields are at risk from peak adult flights.</td>
<td>20 ________</td>
</tr>
<tr>
<td>Inspect all transplants and use only if free of diamondback moth, black rot, blackleg, clubroot, and Alternaria leaf spot.</td>
<td>20 ________</td>
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<tr>
<td>After harvest in early and mid-season fields, disk/plow cauliflower residues to promote breakdown of tissues infected with black rot, Alternaria leaf spot, blackleg, clubroot, downy mildew, root rot and Sclerotinia white mold.</td>
<td>10 ________</td>
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<tr>
<td>After harvest, establish a cover crop for weed control, nitrogen retention for early and mid-season fields.</td>
<td>10 ________</td>
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<tr>
<td>After harvest for late season plantings, interseed a cover crop at last cultivation.</td>
<td>10 ________</td>
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</tbody>
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### Cultural Practices

**For seedbeds:**
- Rotate and isolate seedbeds from production areas to reduce incidence and spread of diseases such as Alternaria leaf spot, black rot, blackleg, downy mildew, root rot, and clubroot diseases. 10 ________
- Lime seedbeds to pH 7.2 to 7.5 for clubroot control (where present). 5 ________
- Scout for black rot (where present) and destroy any black rot-infested beds. 10 ________
- Strive for weed-free beds to ensure weeds do not interfere with transplant operations. 10 ________

**For fields:**
- Do not plant into fields with a history of Fusarium yellows or widespread clubroot. 10 ________
- Adjust (spot treat with lime) pH to between 7.2 and 7.5 in spots where clubroot was noted in previous crops. 10 ________
- Plant cauliflower where crucifers were not grown for at least three years to reduce Alternaria leaf spot, black rot, downy mildew, root rot, Sclerotinia white mold, sugar cauliflower cyst nematode (four years for blackleg; seven years for clubroot, Fusarium yellows). 20 ________

**For seedbeds and fields:**
- Test soil at least once every three years. Maintain records. Fertilize according to test results. 10 ________
- Do not apply animal manure after planting. Make sure all preplant applications of manure are properly incorporated into the soil before planting. 20 ________
- Apply any fertilizer/manure according to a Farm Nutrition Plan. 20 ________

**Pesticide Management**

Approved and registered pesticides are used according to label. Application records, including date, location, applicator, target pest, pesticide name, EPA registration number, formulation, rate and number of acres treated are maintained. 10 ________

Insecticide/fungicide sprayer is calibrated at least once a year. 10 ________

Herbicide sprayer is calibrated at least once a year. 10 ________

Drift is minimized. 10 ________

Among pesticides of comparable efficacy, the one with the least risks to farmworker safety, natural enemies and the environment is selected. 10 ________

Pesticides are applied using techniques to provide good coverage. At least once per season, sprayer coverage is tested using water-sensitive paper. 10 ________

If pesticides do not appear to be effective, contact Cooperative Extension Service to check for resistance to pesticides. 10 ________

**Column Total:** ________

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(Continued)
### Disease Pest Management
Scout weekly for diseases. For black rot, downy mildew, Alternaria leaf spot, Fusarium yellows, and Sclerotinia white mold. Use recommended scouting techniques. For cabbage maggot, clubroot, root rot and sugar cauliflower cyst nematode, note presence.

If black rot occurs in field, do not cultivate or spray until foliage is dry. Clean equipment after use in infected fields.

If *Alternaria* is found to be present, try to tie plants late and harvest earlier to avoid infection spread.

### Insect Pest Management
Follow established thresholds for insect pests whenever available.

Scout weekly for insect pests: cabbage looper, diamondback moth, imported cabbageworm and cabbage aphids. Use recommended scouting techniques. Scout one to three times per week for flea beetles when plants are in seedling stage. For cabbage maggot and sugar cauliflower cyst nematode, note presence or absence.

If flea beetles or aphids are not at or above thresholds, use *Bacillus thuringiensis* materials for caterpillar control.

Keep records of pest densities, biological control techniques used, cultural procedures, and pesticide applications. Keep records of pest populations for each field for review in future years. Keep records of natural enemy populations.

### Weed Pest Management
Make a weed map post-harvest to evaluate effectiveness of weed control strategies. Review weed maps of fields to choose appropriate weed control strategies the following season.

### Weather and Crop Monitoring
Weather and crop parameters are monitored and recorded daily.

- Min/max temperatures
- Rainfall
- Hours of leaf wetness
- Stage of plant development (by cultivar weekly)

### Education
Reference library of one or more books on cauliflower management is maintained. (List books.)

1. _________________________________ 10
2. _________________________________ 10
3. _________________________________ 10

Grower attends one or more Cooperative Extension-approved workshops during the year.

1. _________________________________ 10
2. _________________________________ 10
3. _________________________________ 10

Grower is a member of one or more grower associations.

1. _________________________________ 10
2. _________________________________ 10
3. _________________________________ 10

Grower subscribes to one or more Cooperative Extension or industry trade publications.

1. _________________________________ 10
2. _________________________________ 10
3. _________________________________ 10

Grower maintains a library of one or more titles on pest management.

1. _________________________________ 10
2. _________________________________ 10
3. _________________________________ 10

### Additional Practices
Fieldworker sanitation practices are instituted (i.e., wash hands before harvesting/handling crop).

1. _________________________________ 10
2. _________________________________ 10
3. _________________________________ 10
4. _________________________________ 10

### Acknowledgment
This IPM Checklist for Cauliflower is adapted from the New York State Integrated Pest Management Elements for Cauliflower, by Curt Petzoldt, vegetable IPM coordinator, with input from Cornell research scientists, Cooperative Extension educators, and cauliflower growers and processors.