









## Ontario Crops Research Centre – Bradford (Muck Station) IPM Report 2024

Forecasting, weather and degree day information as of 13 June 2024 Standard Growing Degree Day Model (starting 1 April):

| MODELS           | CUMULATIVE  | DEGREE DAYS SINCE |
|------------------|-------------|-------------------|
|                  | DEGREE DAYS | LAST REPORT       |
| Growing degree   | 576         | 37                |
| days (DD base 5) |             |                   |

## **Insect Degree Day Models:**

| MODELS          | CUMULATIVE  | THRESHOLD ONE            | THRESHOLD TWO                 | COMMENTS:                  |
|-----------------|-------------|--------------------------|-------------------------------|----------------------------|
|                 | DEGREE DAYS |                          |                               |                            |
| CARROT RUST FLY | 715         | Emergence at 329-        | Emergence at 1399-            | Activity                   |
| (DD base 3)     |             | 395 DD (1st gen)         | 1711 DD (2 <sup>nd</sup> gen) |                            |
| ONION MAGGOT    | 644         | Emergence at 210         | Emergence at 1025             | Activity                   |
| (DD base 4)     |             | DD (1 <sup>st</sup> gen) | DD (2 <sup>nd</sup> gen)      |                            |
| CARROT WEEVIL   | 449         | Egg laying starts at     | Egg laying 90%                | Weevils are                |
| (DD base 7)     |             | 138-156 DD               | complete at 455 DD            | approaching the            |
|                 |             |                          |                               | end of their egg           |
|                 |             |                          |                               | laying period              |
| ASTER           | 333         | Nymphs emerge at         | Adults emerge at              | Nymph activity             |
| LEAFHOPPER      |             | 128 DD                   | 390 DD                        |                            |
| (DD base 9)     |             |                          |                               |                            |
| TARNISHED       | 180         | Activity can start at    |                               | Activity                   |
| PLANT BUG       |             | 40 DD                    |                               |                            |
| (DD base 12)    |             |                          |                               |                            |
| CABBAGE         | 510         | Emergence at 314         | Emergence at 847              | Activity                   |
| MAGGOT          |             | DD (1 <sup>st</sup> gen) | DD (2 <sup>nd</sup> gen)      |                            |
| (DD base 6)     |             |                          |                               |                            |
| SEEDCORN        | 644         | Emergence at 200         | Emergence at 600              | 2 <sup>nd</sup> generation |
| MAGGOT          |             | DD (1 <sup>st</sup> gen) | DD (2 <sup>nd</sup> gen)      | emergence                  |
| (DD base 4)     |             |                          |                               |                            |





















## **Disease Forecasting**

| Disease model                                  | Cumulative DSI                                   | Change since last report | Comments                     |
|--|--|--------------------------|------------------------------|
| BOTCAST (Botrytis leaf blight)                 | 114  | +4                       | Low risk. No spores trapped. |
| DOWNCAST (Onion downy mildew)                  | No sporulation-<br>infection periods             | -                        | Low risk                     |
| BSPCAST<br>(Stemphylium leaf blight)           | Conditions have not been favourable              | Risk maintained          | Moderate risk                |
| White Rot on Onions                            | 45   | +2                       | High risk                    |
| Sclerotinia (White Mold) on Carrot             | 0  | -                        | Low risk                     |
| TOMCAST<br>(General conditions for<br>disease) | 64   | +2                       | Low risk                     |
| BREMCAST<br>(Lettuce downy mildew)             | Sporulation-<br>infection periods on<br>3/3 days | Risk maintained          | High risk                    |

## **Daily Weather**

| Date (June) | Max temperature (°C) | Min temperature (°C) | Rain (mm) |
|-------------|----------------------|----------------------|-----------|
| 10          | 13.6                 | 9.9                  | 0.0       |
| 11          | 18.8                 | 9.8                  | 0.0       |
| 12          | 24.7                 | 8.1                  | 0.0       |

Soil Temperature (°C): 5cm: 14.8







