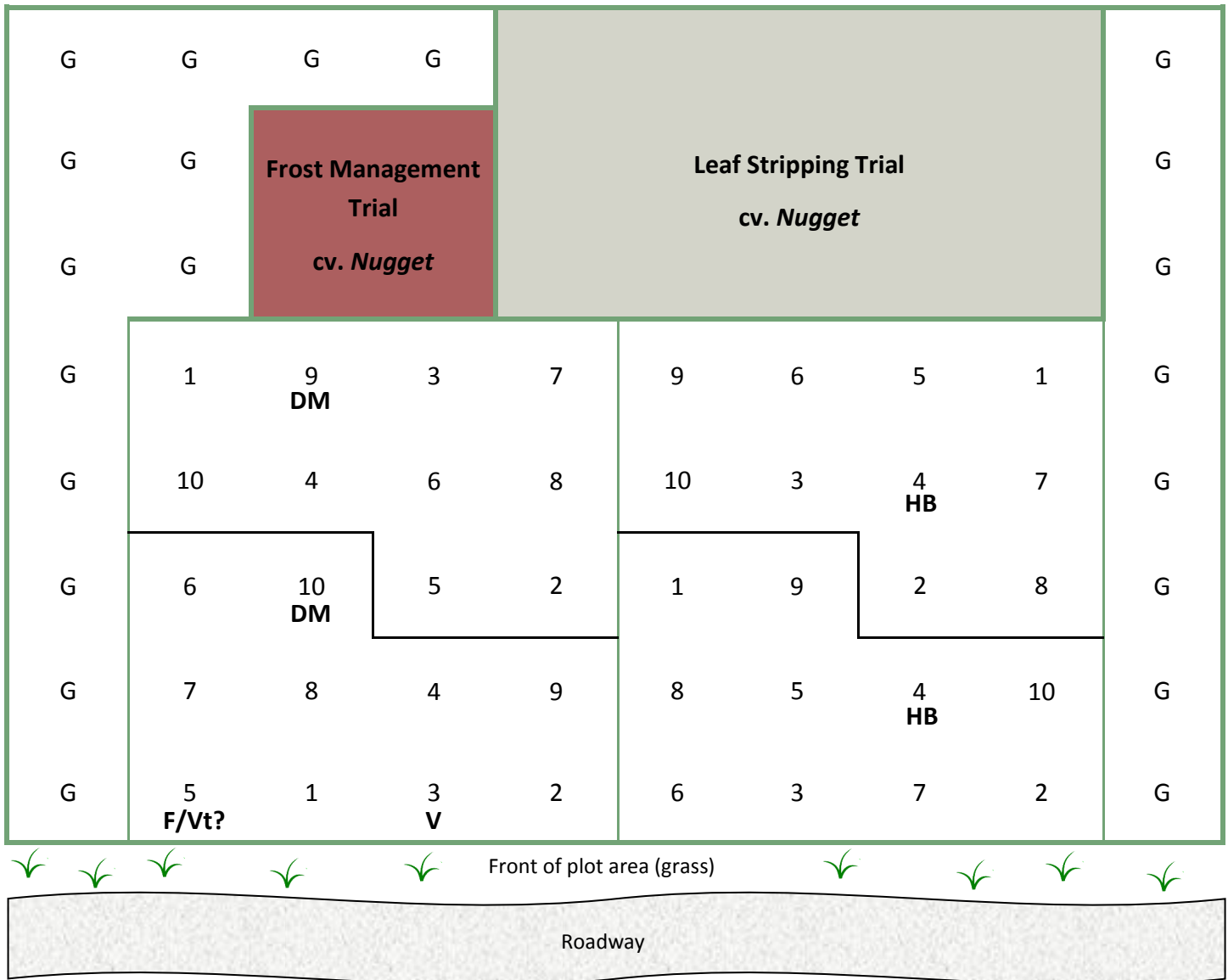




# Hops: A Potential Niche Crop For Ontario (2013-2015)



## Research Hop Yard Plot Map



### Legend

#### Cultivar Assessment

- |                    |                              |
|--------------------|------------------------------|
| 1. Cascade         | 7. Chinook                   |
| 2. Hallertauer     | 8. Galena                    |
| 3. Sterling        | 9. Centennial                |
| 4. Northern Brewer | 10. Naturalized (Bertwell)   |
| 5. Zeus (CTZ)      | G. Guard plants (cv. Nugget) |
| 6. Crystal         |                              |

**Planted:** 30 MAY 2013

**Plot Size:** 5 m long x 4.5 m wide (5 hills/plot)

**Spacing:** Row 4.5 m; Hills (in-row) 1 m

## Legend

### Cultivar Assessment Pest Symptoms

<b>DM</b>	Downy Mildew ( <i>Pseudoperonospora humuli</i> )
<b>F</b>	Fusarium Canker ( <i>Fusarium sp.</i> )
<b>Vt</b>	Verticillium wilt ( <i>Verticillium sp.</i> )
<b>V</b>	Carlavirus (American hop latent, Hop latent or Hop mosaic virus)
<b>HB</b>	Potato leafhopper damage ("Hopperburn") ( <i>Empoasca fabae</i> )

### Frost Management Trial

To better understand the impact of cultural management practices on hop yield in years of severe, late frost episodes.

4 cultural treatments being assessed in 2015:

1. Control (no cut back or removal of bines);
2. Cut tip of bine to above second node from tip, no removal of bine (simulate frost damage to growing point);
3. Cut tip of bine to above second node from tip, no removal of bine + re-train one bine from new basal growth on string 7 days later;
- 4 & 5. Remove entire bine (simulate complete death of bine) and re-train bines from new basal growth on string 7 days later (modified from 2014 treatments).

### Leaf Stripping Trial

To better understand the impact of cultural management practices on hop yield in years of severe downy mildew pressure.

5 cultural treatments being assessed in 2015:

1. Control (no stripping or removal of leaves/laterals);
2. Strip bines of lower leaves and laterals up to 50 cm from ground when plant height has reached 250-300 cm;
3. Strip bines up to 100 cm from ground;
4. Strip bines up to 150 cm from ground;
5. Strip bines up to 200 cm from ground.