

Project Name: Nostoc Efficacy

| | | | | | | | |
|------------|----------|----------------|--|------------------|--|--|-------------|
| New | X | Ongoing | | Completed | | Duration if ongoing or completed: | 2020 – 2021 |
|------------|----------|----------------|--|------------------|--|--|-------------|

Project Description:

The economic impact of Nostoc is difficult to calculate. It is a health and safety concern (Slipping hazard) for employees. Preliminary data is available for Captain XTR and there is at least one other potential active to screen, SP8010. Additional research is needed on the optimum dose and frequency of applications.

Research Project Abstract (if available):

n/a

Target Species (Phytotoxicity, or common and Latin name of arthropod, pathogen, weed):

Nostoc sp.

Target Crops (list tested crops if ongoing or completed project)

n/a

Target Product(s)(list tested products or numbered compounds if ongoing or completed project)

Captain XTR
Diuron
Kalmor
TDA-A-F2B

Product Registration and Research Status

| | Fully Screened (also includes standards) | Partially Screened through IR-4 ¹ | Need Data Across Species? |
|---|---|---|----------------------------------|
| Labeled Generally & Commercialized | | | |
| Labeled Generally But NOT Commercialized | | | |
| Labeled Specifically & Commercialized | | | |
| Labeled Specifically but NOT Commercialized | | | |
| Not yet registered or Labeled | | | |
| No longer available for development | | | |
| * IR-4 Data contributed to registration decision – either adding pest to label or not pursuing further research | | | |
| 1 At least one species screened fully | | | |

| Area | Characteristic | Pro | Con |
|---|---|------------|------------|
| Availability & effectiveness of alternative management tools | No products are specifically labelled for management of Nostoc Algae on hard surfaces such as gravel | X | |
| Damage potential of target | Not directly impacting crop growth, but there is potential for worker injury in and around nurseries where walkways are slippery due to Nostoc growth | X | |
| Performance and crop safety of proposed products (from other systems) | | | |
| | | | |

| | | | |
|--|--|--|--|
| Compatibility with IPM, resistance management programs | | | |
| Economics | | | |
| Geographic distribution | | | |
| Manufacturer interest in labeling products | | | |
| Other | | | |
| Comments: Other copper compounds, such as Junction, were tested and were less effective. Although less effective, Junction is already labeled for use in nurseries. Thus, this should probably also be considered for additional testing. | | | |

| |
|--|
| IR-4 Efficacy Trials to Date |
| <p>Average rating on a scale of 1 – 5 with 1 = 0 to about 50% efficacy and 5 = 100 efficacy or equivalent to non-inoculated control; minimum to maximum rating; number of trials. For product/insect combinations that are blank, IR-4 has not screened this combination.</p> <p>A rating of 2 or lower is considered unacceptable efficacy (<i>red text</i>). A rating of 3 or higher is considered commercially acceptable and those with more than 3 trials are complete (<i>green text</i>). 'Labeled' indicates that IR-4 generated data in at least one trial and that this insect species or genera is listed on the label. For insect/product combinations that are blank, IR-4 has not screened this combination.</p> |

| MOA | Product (Active Ingredients) | Nostoc (<i>Nostoc sp.</i>) |
|---------|---|------------------------------|
| FRAC M1 | Kalmor (copper hydroxide) | 2.3 (1 - 3) n3 |
| unknown | Captain XTR (copper ethanolamine complex) | 4.0 (2 - 5) n3 |
| unknown | TDA-A-F2B (TDA-A-F2B) | 1.0 (1 - 1) n3 |
| WSSA 7 | Diuron 4L IVM (Diuron) | 1.7 (1 - 3) n3 |