

## Metalosate® Trial to Control Tipburn in Romaine Lettuce

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### INTRODUCTION

Romaine lettuce is considered a high-value crop in the areas where it is grown. This variety of lettuce is often difficult to grow because it is very prone to internal tipburn. Based on work done in other crops, as well as in lettuce, it was believed that the application of Metalosate® Boron and Metalosate Calcium could aid in the reduction of the internal tipburn disorder. This trial was set up to investigate this idea.

### MATERIALS AND METHODS

Plants were grown in a greenhouse and treated when they had four to five rosette leaves. The rate applied was 27 fl. oz./acre (2 liters/hectare) of Metalosate Calcium and 3.4 fl. oz./acre (0.25 liters/hectare) of Metalosate Boron. Applications were made three times on a seven-day interval. The plants were harvested when mature and visual observations were made to determine if tipburn was present. Tipburn was found in the untreated plants as well as the treated plants. The number



**Figure 1. Healthy Romaine Lettuce**

of plants with tipburn was significantly reduced by the application of Metalosate Calcium and Metalosate Boron. There were 53 percent of the plants in the untreated group with tipburn compared to 27 percent of the plants in the treated group.

### RESULTS AND DISCUSSION

A significant reduction in tipburn was observed in the Metalosate-treated plants when compared to the untreated plants. In an earlier field study it was observed that treatments of Metalosate Calcium and Metalosate Boron

completely eliminated tipburn. In that trial the amount of Metalosate Boron was more than what was applied in the second trial, illustrating the important role boron plays in relation to calcium utilization and crop quality. For optimal results the amount of Metalosate Boron should be in the range of 8 fl. oz./acre (0.5 liters/hectare).

For more information on how the Metalosate products can benefit you, please contact your local Albion Plant Nutrition representative. [↻](#)