

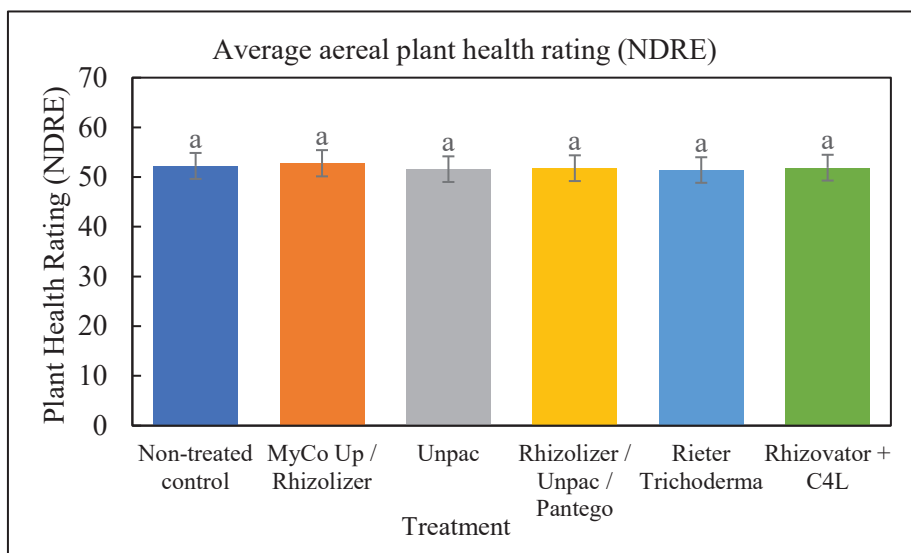
## Effect of biostimulants on yield and plant quality on fall planted strawberries

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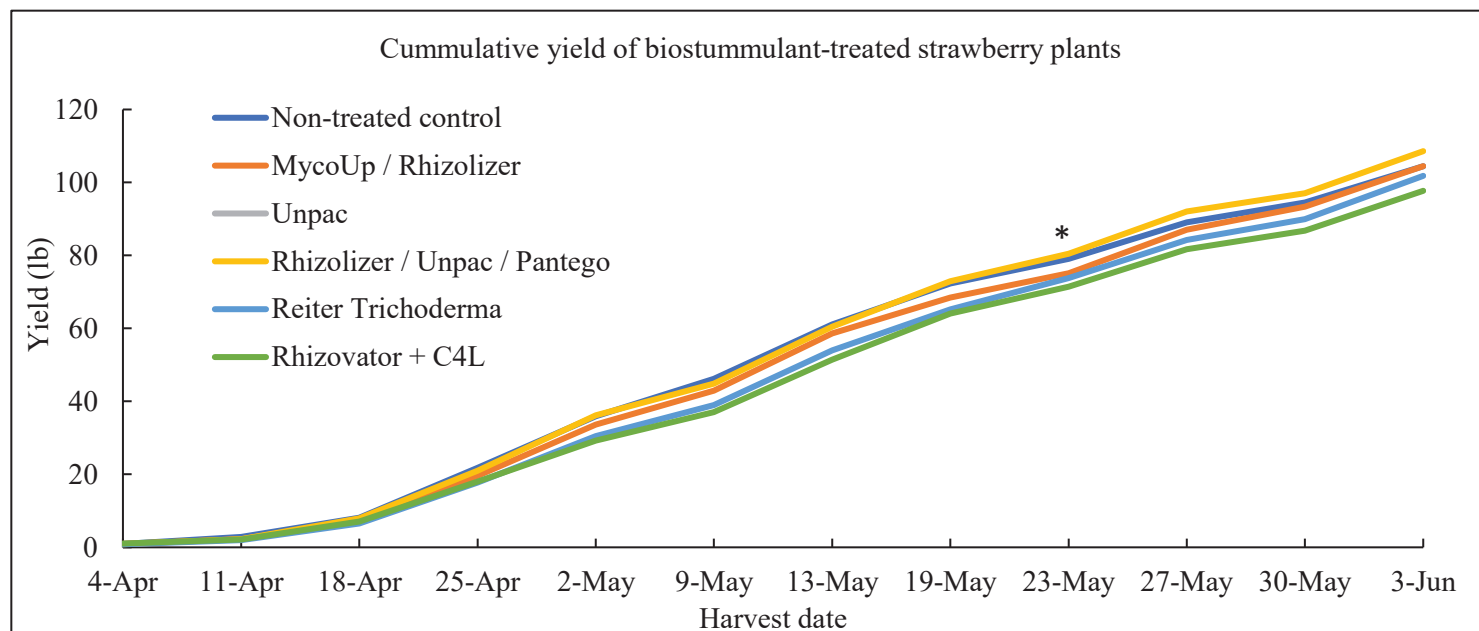
This experiment was conducted on fall-planted 'Monterey' strawberries to evaluate the effect of five biological products applied via drip irrigation and/or foliar application on yield and plant health. The study took place in field 35A at the Cal Poly Strawberry Center, in a clay loam soil in a first-year strawberry planting. Four beds were shaped at 64-inch spacing, covered with black non-TIF plastic mulch and planted with four rows of bare-root transplants on 1 Nov 2024. Each bed, representing a replicate, was divided into six plots, with 66 plants per treatment. Treatments were delivered through three drip irrigation lines (Fig. 1). Foliar treatments were applied using a backpack sprayer. Plants were fertilized following standard growing practices with 5 lb N/acre/week from Jan through Mar, increasing to 10 lb N/acre/week from Apr through Jul. Treatments were applied every three weeks, from 16 Jan to 24 Jul. Applications were made at max label rate. Plant vigor was assessed both visually (on a 1–10 scale) and aerially using NDRE drone imagery (Fig. 2). Fruit (both marketable and unmarketable) were harvested weekly beginning 4 Apr and transitioned to bi-weekly from 23 May to 3 Jun, due to increased fruit volume for a total of 12 harvests.



**Figure 1.** Manifold and drip chemigation system, picture taken on 16 Jan 2025.



**Figure 2.** / =Weekly rotation; + =Tank mix. Average NDRE (Normalized Difference Red-Edge;  $P = 0.05$ ) to assess plant quality. Error bars represent standards deviation from mean.



**Figure 3.** / =Weekly rotation; + =Tank mix. Cumulative yield (lb) of fall-planted strawberries ('Monterey') over time when treated with biostimulants in San Luis Obispo, CA. \* = Significantly higher marketable yields were observed in Unpac and Rieter Trichoderma compared to the control for the 23 May harvest.

