



SAFFRON: A HIGH VALUE CROP FOR NORTHERN HIGH TUNNELS



- Most expensive spice in the world (\$5,000/lb), in VT the retail price is \$19/0.3 oz.

- **Used for food flavoring and coloring.**

- Medicinal properties: anti-carcinogenic, combats depression, reduces cholesterol levels, and arteriosclerosis. Corms may contain fungicidal components.

- **Crocus species adapted to arid/semi-arid areas, and is somewhat resistant to cold (-4°F).**

- Blooms in the fall, and is dormant from Mar. - Sept.

- **Stamens, petals and corms also have medicinal and value added potential.**

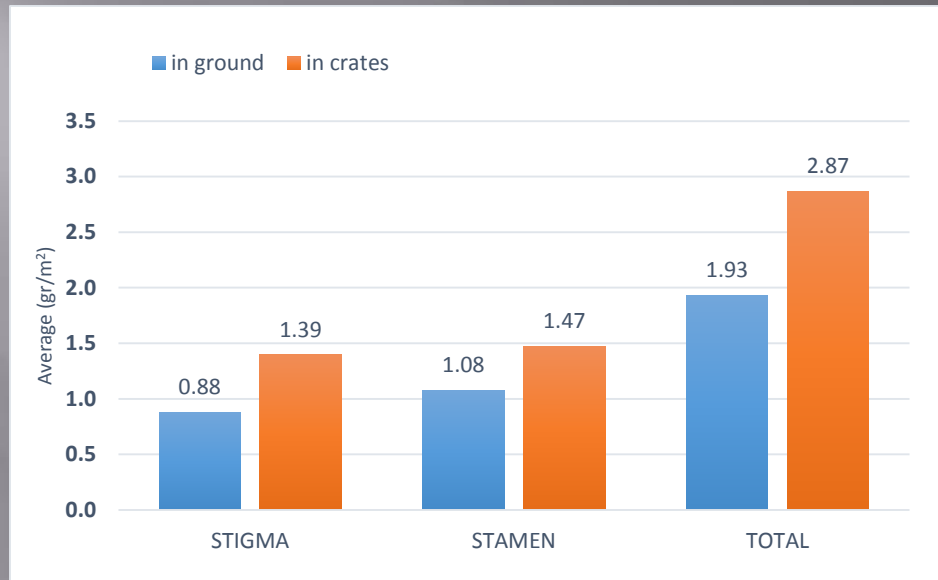


WHAT ARE WE DOING?



- **Grown in basic high tunnel in northern Vermont.**
- Tested two cultivation methods: in milk crates and in raised beds.
- **Corms from PA were planted in late August.**
- Planted at a density of 100 corms per yd².
- **Bloomed for 4 wk from Oct. – Nov.**
- Dried at room temperature and in the oven.

WHAT HAPPENED?



Dry weight of stigmas and stamens per yd²

- Yields of 0.9 – 1.4 g/yd².
- **Significantly higher yield in crates than in the ground.**
- Higher yields than reported for traditional saffron growing areas, which is 0.34 g/yd²
- **Based on our yield, the gross value could be \$100,000/acre.**

WHAT'S NEXT?

- **Assess saffron quality (HPLC).**
- **Evaluate winter survival.**
- **Compile temperature data.**
- **Determine production costs.**
- **Seek funding to repeat the experiment and expand on the scope of treatments.**

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