Drip Irrigation System Design
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In my drip irrigation system, I looked for an alternative to the very popular trend of using polyethylene and instead used vinyl, which might be a cheaper; therefore, more efficient route than the polyethylene route.

Materials required:

1. 3x 100’, 1/4” Vinyl Brown Micro Tubing
2. 7x DIG ¼” Barbed Tee
3. 1x ¼” Barbed Elbow

The Vinyl Micro Tubing comes at 7.89$ per 100’. So assuming we need a bit less than 300’ per irrigation system. Total, this comes out to 23.67$ per irrigation system on tubing.

For 7 out of the 8 sublines, we can use the DIG ¼” Barbed Tees to connect them with the main line. These tees come out to 0.12$ per piece, so that totals to 0.84$. For the last subline, we can use a ¼” Barbed Elbow to connect it with the main line which cost 0.13$ a piece. Both the Barbed Tees and the Barbed Elbows can be sold in bulk for cheaper, so their might be a few bucks saved here and their.
So these are the final calculations per drip irrigation system:

1. 3x 100’, 1/4” Vinyl Brown Micro Tubing = 23.67$

2. 7x DIG ¼” Barbed Tee = 0.84$

3. ¼” Barbed Elbow = 0.13$

Total: = 24.64$

Final Sketch: