Cut flowers are a potential high value crop for small farms that hasn’t been fully explored for Utah, partly due to a lack of region-specific information. The research objective of developing management strategies of two representative cool season annual crops, snapdragon (Antirrhinum majus) and sweet pea (Lathyrus odoratus) will be to use to Utah high tunnel growers. Results indicated an increase in quality and stem length of snapdragons grown in high tunnels. Sweet peas have shown increased quality when grown during cooler months in high tunnels.

Snapdragon (Antirrhinum majus) ‘Rocket’

- High tunnels increased stem quality, (Fig. 5)
- 9” spacing is preferable for lowering initial costs and labor time.
- Second production peak wasn’t cost effective, could potentially be removed after July and followed by a second planting for fall, (Fig. 6)
- Thrips, aphids and caterpillars were minimal and easily treatable.
- Potential sales - $4,047
- based on a 14’x39’ tunnel and 9” spacing

Snapdragon stem harvest by date. Note high yields in early July.

 rental value.

High market value for sweet peas at 2018 Plans
- Cultivar trials ‘Chantilly’, ‘Potomac’ and ‘Animation’.  
- Determine optimum planting date for increasing yield and quality

Yield increased throughout the summer but quality decreased with high temperatures and significant insect damage. (Fig. 7)

Majority of culls had stem lengths below the 8” grading limitation and insect damage later in the season. (Fig. 10)

‘Mammoth’ and ‘Elegance’ had higher yields than ‘Spencer’ and ‘Royal’ cultivars. (Fig. 8)

High tunnels resulted in greater yields but did not impact quality compared to field plots after July.

Yield comparison - Sweet Pea

CONCLUSION - Snapdragons

- High tunnels did not extend the harvest window earlier in the season, most likely due to a late planting date in May.
- Insect problems were significant. Aphids were treatable but mites could not be controlled by pesticides without damaging the crop. The use of a sacrificial crop or insect trapping row within the tunnel may have value for this crop. (Fig. 10)
- Not cost efficient in mid to late summer due to high labor costs and low quality stems (Fig. 7)
- High market value for sweet peas at $1.25/stem on average through May.

2018 Plans
- More extensive trial of ‘Elegance’, ‘Mammoth’ and ‘Spencer’ cultivars.
- Earlier planting date to capture cooler season.

CONCLUSION – Sweet Pea

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