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Pilot Parcels Project 2012  
End of Season Analysis

For study on interplanting of cover crop seeds with rows of annual cut flower seedlings.

Planting of seedlings in the ground began beginning of June. Seedlings of zinnias and asters were too large to adjust to field conditions of heat and wind. Some were lost. The timing of seedlings leaving the greenhouse and planting in the field was not properly done. Smaller seedlings have a better survival rate and produce blossoms quicker.

None the less, many prospered to harvestable blooms nicely. Cover crop first went in in mid-July.

Weather cooperated for good germination. Tilling began when they reached a height of one inch. Cut flowers were at various stages of production from buds to not yet blooming.

The tilling under of cover crops made a noticeable difference in an even moisture content of the soil. The texture of the soil was light and airy and was easily movable with a hoe. Hilling up of plants when they begin to reach good height is necessary for the stems to withstand high winds without blowing over. Where properly hilled, stems withstood winds nicely, as well as stayed cleaner because hoeing the moister soil produced no dust to blow around.

The soil where cover-cropped did not compact after a heavy rain compared to non cover-cropped areas and also did not develop a top "crust" of hard soil. The soil also remained less compacted in walking areas. Hoeing and tilling moved through the soil more easily in these areas.

Mid – August a second seeding of cover crops was done. It was noticeable that there was less bug damage on ageratum and sunflowers where cover-cropped. The blossoms were also blemish free of spots. Areas without cover-crops were weedy. Although it was most notable on ageratum and sunflowers, arease that were cover-cropped had less bug activity. I did not measure beneficial insects.

I think tilling under the crops at a small stage (closer to germinating) made the soil feel richer.

Weeds became unmanageable when cover-crop seeding and tilling stopped. An extra pair of hands was needed to continue on through frost when crops were finished. Based on observation of first two sowings it would have been beneficial to continue.

Soil tests are needed to compare nutrient levels in the soil and have been sent to U.Mass Amherst. Over all I didn't figure out how to measure the differences with numbers. But it was noticeable on the cut stems where the soil stayed evenly moist and movable and

airy – flowers were bug free and of good clear color as well as strong petals. I did not measure vase life. Continuing the process seems definitely beneficial. The two cover-crops I used were:

1. winter rye alone
2. a mix of field peas, crimson clover, hairy vetch and annual rye.
- 3.

I could not see a difference where I used one or another. They seemed to both show the same results.