

THE ORGRANIC WAY- SOME IDEAS FOR WEED MANAGEMENT IN STRAWBERRIES



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Weed management is difficult in strawberry production, particularly in organic strawberry production where the few herbicides that are available for non-organic production are generally prohibited. This article describes some alternative weed management strategies to herbicides and mechanical and hand cultivation. Good site selection is an important weed management strategy. Select a site with minimal weeds and suppress the weeds in the site prior to planting. Green manure crops are good options for weed suppression. Select green manures that establish quickly and have large above ground canopies.

Quite a bit of research on weed management has been conducted at Cornell University. In one study on matted-row strawberries, critical times during the growing season when plants are most susceptible to weed competition were determined. Weed management efforts can be intensified during those key times. As expected, a key time for weed management is in the first few months during plant establishment. When weeds were not managed for longer than one month following planting, yield and runner production were lower than when plots were kept weed-free during the same time. When weeds were not managed late in the growing season (September) there was little effect on yield and the number of runners compared to when plots were kept weed-free during the same time. While this indicates that early-season weed management is most critical when establishing a new planting, key times of the year for weed management may vary depending on the weed species typically encountered and on soil moisture levels. In the study predominant weeds encountered included yellow nutsedge, common groundsel, purslane and numerous grass species. In no case should weeds be allowed to go to seed and suppress perennial weeds, regardless of the time of year, to prevent them from establishing.

In another study, the practice of growing different living mulches in the alleyways of strawberries in matted-row production was examined. Sudangrass, tall fescue or marigolds were direct seeded during renovation. Researchers found sudangrass to be the best of the three living mulch species for weed management because it rapidly established, was relatively drought tolerant and had a low fertility need. A disadvantage to the sudangrass was that it grew taller than the strawberry plants. However, to contend with this problem, it was mowed as it exceeded the height of the strawberry plants. Another drawback to using sudangrass was that a high level of strawberry clippers was observed compared to the other treatments.

Mulches can also be effective for weed management. In another study at Cornell, commercially available Planter's paper was found to be effective for weed management during the establishment year compared to not using mulch. Fabric weed barriers also are a good option for weed management. If using straw mulch for winter protection of the plants, placing the straw in the alleyways in the spring offers some weed control. If using the plasticulture system, the plastic may be advantageous for limiting weeds. All of these options should be carefully evaluated for suitability on individual farms prior to using them.

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