



Improved End-of-Life of Plastic Mulches

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Mechanically laying biodegradable plastic mulch

Farmers lay mulch in the field right before seeding or planting (Figure 1) to control weeds, conserve soil moisture and get several other benefits during the crop growing season. Biodegradable mulch can be laid mechanically with the same mulch laying equipment that is used to lay polyethylene (PE) mulch, but some minor adjustments are needed.



Photo source: Jazmine Mejia-Munoz

Figure 1. Laying biodegradable plastic mulch with a raised bed shaper.

Laying biodegradable mulch by machine

Plastic mulch layers form raised beds that are 5 to 9 inches in height, and they lay drip tape and plastic mulch in one pass. For newer mulch layers, feed the mulch through the roller bars (Figure 2) and pull the mulch out so that it passes under the guide wheels. Roller bars should move freely so as not to put tension on the mulch. For older mulch layers, the rod that holds the mulch in place (Figure 2) should allow the mulch to roll freely. The wheels of the mulch layer should rest lightly on the mulch or float just above the mulch so as to guide the mulch into the furrows that are opened up by the mulch layer but such that the wheels do not apply pressure to the mulch (Figure 3). With a shovel, throw soil on the mulch where it passes under the wheels or step on the mulch to hold the mulch in place once the tractor starts moving forward (Figure 3). The mulch should be slightly loose on the bed when it is laid (Figure 3). Avoid stretching the mulch too tightly when laying as this will cause it to rip. As the mulch moistens and dries, it will become tighter.

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Figure 2. Feeding the mulch through the roller bar in new mulch layer (left). An older mulch layer (mulch roll inserts as shown in white; right).





Figure 3. Step on the mulch or use a weight to hold it down before the tractor starts moving forward (above). Mulch layer roller bars should move freely and wheels should barely touch the mulch (above right). The mulch should be loose on the bed to avoid ripping (right); it will tighten after it moistens and dries.



Additional Information

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