

# Living mulch in combination with no-tillage

A permanent cover crop grown as living mulch competes with weeds. The vegetable crop is established with a no-till transplanter.

Readiness for use: 

Efficacy: 

## How it works

- A permanent cover crop is grown as living mulch in full width within vegetable crop stands.
- Cover crops should be sown in advance of the vegetable crop establishment, (i.e., cover crop established in autumn before the transplanting of the first vegetable crop in spring). In fact, a complete and homogenous establishment and soil cover of the living mulch is required.
- Vegetable crops are transplanted in no-tilled soil, weed control is ensured by the living mulch, figure 1.
- No-till vegetable transplanter should be provided with proper devices to correctly open the furrow without engulfment due to vegetal residues on soil surface (e.g., a fluted disc coulters cuts and orients plant residues on topsoil enhancing the performance of the other working tools of the transplanter), figure 2.
- Localized fertilization and irrigation reduce weeds accessibility to nutrients and water, figure 3.
- Criteria that should guide the choice of cover crop species for living mulch, should be based on avoiding competition with the vegetable crop.



Figure 1. No-till transplanter working on living mulch of “dwarf” white clover var. Pipolina



Figure 2. Fluted disc coulters equipped on no-till vegetable transplanter.



Figure 3. No-till vegetable transplanter equipped with system for localized fertilizer distribution.

## Read more

[A Field Vegetable Transplanter for Use in Both Tilled and No-Till Soils](#)

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