

Big River Farm of Belmont, NY received a SARE grant to build and utilize a sod undercutter on their mixed vegetable organic farm. Using a design developed by Ohio State University the plan was to plant late season transplants i.e. tomatoes and peppers into a mechanically killed cover crop planted the previous Fall. We had hoped to achieve tolerable weed control and eliminate the use of plastic mulches. By plowing down the crop residue along with the remaining mulch, we would also be increasing soil tilth and fertility. The "undercutter" as originally designed, was meant to be used on a raised bed system. However, since we were not set up to use raised beds, we were hoping to be able to use it in our existing flat fields. We planted a cover of hairy vetch (30%) and winter rye (70%) at a rate of 80# per acre late the previous August. Two weeks prior to setting out our transplants (3rd week of the following May), we began to use the "undercutter" to kill the sod. Initially the implement cut the sod as planned. However, as we began to move into the field further we noted that the cover began to ball up on the inside edge of the cutter to raise up rendering it useless.

We felt that a possible solution would be to install rolling colters in front of the cutter bars so as to side cut the sod cover before undercutting the roots. Unfortunately, Big River Farm went out of business before we were able to install the colters and test the theory. It may be that the undercutter is only adaptable to raised bed farming. We have retained the undercutter and would be happy to have someone take it and test this out.

Sincerely,
[Handwritten Signature]