

## Let Sleeping Weeds Lie

If there is anything we know for sure it is that tillage destroys weeds. Yes, but phrase it differently, and the truth shifts. Tillage can *stimulate* weeds. Repeated, light spring tillage is used to “wake up” – and then remove weeds, reducing the weed seedbank.

**Ron and Maria Rosmann and family** (Harlan) believe tillage has its limits as a weed control technique. Ron thinks many organic farmers could take advantage of a different strategy – let the weeds sleep! In 2007, Ron carried out a trial to show that ridge tillage can control weeds more effectively than conventional tillage in soybean. Ron did similar trials in 1988, 1989, and 1997, but this time he let each treatment have the planting date that was best for that system. [Table 2 \(click to view\)](#) shows the trial compared three weed management systems for soybeans: ridge-till planted May 14, ridge-till planted May 21, and conventional tillage soybeans planted May 28.

Later planting usually helps weed control, but the conventional tillage soybeans had an average of 491 broadleaf weeds per acre, a level that could have affected soybean yields. The two ridge-till treatments came in at 178 and 107 broadleaf weeds per acre.

The ridge-till treatments also outyielded conventional tillage soybeans. Ron says the early beans got off to a good start and were probably better able to stand up to the dry spell that began at the end of May.

Economics is the final piece of the puzzle. Differential costs for early-planted ridge-till soybeans came to \$43.54 per acre. Late-planted ridge-tillage required more bean walking to remove weeds and cost an estimated \$66.54. The conventional tillage soybeans came in at a cost of \$108.67 per acre. Lower costs, fewer weeds, and decent yields – Ron hopes more organic farmers will get the picture about ridge tillage.



**Ron Rosmann describes the tillage weed comparison at the Aug. 29 field day**