



## Deliver the ONE-TWO Punch

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### Residue, MT-17, Myco Seed Treatment, BacPac, and SP-1

Use the **ONE-TWO Punch** to select the right product for the job.

The **FIRST PUNCH** is to improve the fertility of your soils by improving **tilth**. With improved biological, biochemical, and physical characteristic, your soil provides the plant with more favorable growing conditions. As soon as one crop is harvested, work begins for the next crop. **Residue** and/or **MT-17** are used in prep for the next crop for the following reasons:

- You want to **accelerate the decomposition** of the 1st crop's residue (capture its carbon value)
- It's one of the best opportunities you have to **improve soil tilth**. There are many benefits to improved Soil tilth, but perhaps the best benefits are:

- Improved water holding capacity
- Increase water infiltration on heavy soils and decrease water infiltration on sandy soils.
- Decreased root impedance
- Better gas exchange
- Burn less diesel
- Less trash
- Make a better seedbed

The best product choice from Douglas Plant Health is determined by the type of residue you want to transition into microbially active carbon. Residue that contains significant levels of lignin, like corn stalks, wheat straw, or thatch should always be treated with the fungal organisms in **Residue**.

Green manures, animal manures, and compost are best treated with the bacteria in **MT-17**. In cases where a combination of substrates are present, a dual application of Residue and MT-17 is appropriate.

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Now you're ready for the **SECOND PUNCH**. Here's where the Douglas Plant Health **bio-fertilizers** do their best work by **improving the availability and root uptake of plant nutrients**.

**SP-1, MST, are BacPac** are most effective here, especially when your soil tilth has been improved as achieved in the **FIRST PUNCH**.

**A note about bio-fertilizers...** The closer you can get the product to the emerging roots, the greater chance that they will become productive members of the plant's rhizosphere and endosphere.

**MST** and **BacPac** deserve mention here. As seed treatments, MST contains beneficial mycorrhiza fungi while the BacPac does not. Some crops, especially those with tender, oily seeds like peanuts should not be treated with fungal products or products that promote soil fungi. For those crops, use BacPac.

Seed treatments alone, however, are not always enough as they deliver a relatively small number of microbial colonists to the rhizosphere as compared to label rates of **SP-1**. This matters greatly when there's competition for homesteads in the rhizosphere. Our dry seed treatments take full advantage of placement and seed coverage while our liquid bio-fertilizers bring diversity to colonization and do so in numbers to ensure success.

Selecting the best biological product for the job is easier when you remember the  
**ONE-TWO PUNCH**.

**FIRST PUNCH:** Improve the fertility of your soil by improving soil tilth.

**SECOND PUNCH:** Improve the crop by improving the availability and root uptake of plant nutrients with a Bio-Fertilizer.



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Give us a call today so we can help you maximize your Total Farm Profitability.