

## TILLAGE TOOLS

Leveraging tillage will be a primary defense mechanism at the beginning and throughout the season. Prior to planting, it is important to get the soil bed as level as possible so early forms of tillage via a rotary hoe, harrow, and tine weeder can have good soil contact to eliminate germinating weeds. If you can see weeds, it is too late. Being proactive, preventative, and aggressive is key. Plan on performing some form of tillage every 3-5 days. Consider increasing planting populations to compensate for the many tillage passes.

**ROTARY HOE** – Based on a circular wheel ringed by dozens of tiny, spoon-shaped "hoes". These wheels are mounted very close together on a toolbar to achieve complete soil coverage.

This tool can be utilized to loosen soil and pre-and post-emergence of planted crops and is effective on mitigating very small weeds. Ground speed will be 11-15 mph.



**TINE WEEDER** – The 45° tines are more effective at uprooting weeds than they are for covering them. The longer tines are better able to follow the surface of the soil so that they loosen the soil evenly. The tines assist with removing shallow germinated weeds that are in the crop row without disturbing the planted crop.

Tine weeders can be leveraged pre-and post-emergence. Reduce ground speed when crop is emerged.



**IN-ROW CULTIVATORS FOR EARLY GROWTH STAGES** – The addition of side shields allows for early cultivation and crop protection while achieving desired ground speeds. Good to match up cultivator size with planter size for better precision. A Cultivator, with barring off discs, is a good tool to have early on as the barring off discs help pull soil away from the plant without disturbing the root zone. It is critical early on to continue to use the rotary hoe and/or the tine weeder as the weeds in the row will be persistent.



**IN-ROW CULTIVATORS FOR LATER GROWTH STAGES** – Aggressive cultivation is important. RTK allows for the usage of wider sweeps than one is comfortable using. Another cultivator add on is ridging wings which allow for more aggressive dirt movement for furrow building. Some ridging wings are adjustable.

