

Organic Mechanical Weed Control Systems

Mulches made of paper or plastic can be used to suppress weeds by denying them light. Crop is planted by punching holes to put in transplants at the desired intervals. Some mulch layers automatically punch holes as material is laid down and some systems use a mulch pot transplanter to make the hole and set the seedling, set or seed.



1A Holland mulch layer puts down 24' wide material



1B Dibble wheel pokes holes into plastic for planting. Open concept allows easy spacing changes and spike changes for different sized plugs.



2 One of the many bed-formers that combine a mulch layer for one pass operation. Note drip tape also laid.

When mulch is not used hand hoeing is the simplest method using traditional hoes in all their variations; a few are shown below.



7 "Valley Oak" brand wheel hoe uses "stirrup" type blade.



6 "Hoe" - one of several attachments for Stihl "Multi-Task" Gas powered weed cutter.

As plantings become bigger wheel hoes in several variations became practical and speed up the work. Because they work in straight line hand hoeing still may be needed to get weeds from between plants along the row.



8 Glaser Wheel Hoe



9 R2 075

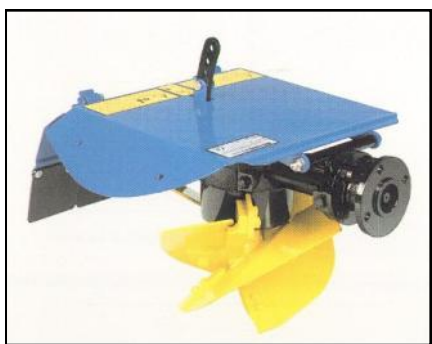
As plantings become still larger and when ground is harder to work because of soil type, lack of water or heavier weed pressure, an option is use (2) wheel tractors with many kinds of implements.



11 Interrow Cultivator for Walking



12 Narrow Power Harrow takes out weeds between growing rows. note depth control skids



13 Rotary Plow for Walking Tractor

When row lengths become long enough to justify it, four wheel tractors can be equipped with a vast array of cultivator implements to do single or multiple beds. Some rely on tractor driver to steer tractor and the implement and some use a second operator to steer



Ideal for gardens!

- Toolbar accommodates IHC-style wedge clamp & bolt
- Frame for shaping rows or cultivating

15 Keulavator system 3pt. Arch with

the implement. In either case plantings need to be in as straight a line as possible with multiple lines of plants parallel to one another and parallel to bed if a raised bed is used.



16 "S" Tine Cultivator with hilling up discs.



17 Interrow Cultivators for small tractors use (2) or more heads Steerable or fixed.



16A Rod weeder : spring steel tines pull out shallow rooted weeds.



21 Brush Hoe uses stiff bristled brushes to "sweep" out weeds while metal tunnels protect crop.



20 Steerable Power Harrow heads cultivate beside plants and between them.

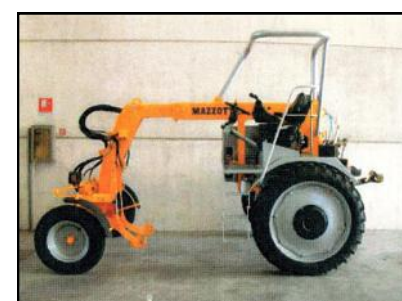
For high production high precision cultivations there are specialized tractors also known as tool carriers designed to put cultivation implements directly in front and below tractor operator so that he can observe effectiveness and accuracy of tillage being done. Some of these types also allow high clearance to work later crop growth.



22 Standard Kubota L3000 with front and rear axles lengthened on right so driver can see belly mounted cultivator.



23 Gendt Tool Carrier with interrow cultivator



24 Mazzotti Tool Carrier note central 3pt. As well as rear one. Hydraulic motors tools in center and rear.