

Introduction

The soil is often puddled to decrease deep percolation of water and to control weeds. It may be done in many different ways from human and animal systems to specialized puddling machines.

Cage wheels

Steel or iron cage wheels are used on both 2-wheel and 4-wheel tractors to puddle the soil and bury weeds by operating at soil conditions with high level slip. This may be done in association with using a mounted rotavator or dragging a leveling board behind.



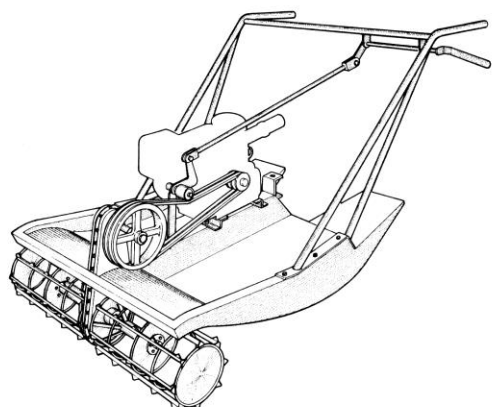
Hydrotillers

A hydrotiller puddles the soil and buries weeds and residue by a powered rotor. Hydrotillers are propelled forward by an engine driven rotor attached to a platform that incorporates airtight floats. They only work in flooded conditions and transportation to and from the field may cause problems. In some instances wheels are fitted to the outside of the rotor for transportation purposes.

Tractor mounted puddlers

A 3-point linkage puddler is very similar in design to a rotavator except they are less robust and have smaller rotating drums and shoes. They are normally wider than a conventional rotavator. They can be used in both wet and dry conditions but standing water in the field is preferred. They leave the field level and work best when laser controlled.

Normal rotavators can also be used for wet puddling but care must be taken that the drive mechanism is totally sealed to prevent water intrusion



Weight with engine	135 kg	Rotor diameter and width	38 cm x 1 m
Horsepower (brake hp)	7.5-12	Rotor speed	325 rpm
Fuel	diesel or gasoline	Field capacity, first pass (puddling and incorporating)	1.8 ha/8 h
Length	195 cm		
Width	100 cm		
Height	75 cm		



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