

CHAPTER 4. CROP HUSBANDRY

4.3 INTER-ROW WEEDING EQUIPMENT

4.3.2. USING ALTERNATIVE WEEDING CULTIVATORS

THE HOUE OCCIDENTALE

The Houe Occidentale is widely used in parts of West Africa and constitutes an excellent light-weight weeding tool (Fig.1). Depth control is achieved by adjusting the height of the support wheel and the spacing of the 2 rear tines may be adjusted across the transverse beam.

Duck foot points are fitted and the implement may be pulled by a single animal.



Fig. 1 The Houe Occidentale is a single purpose light weight implement used for inter row weeding.

Photo: Paul Starkey

THE PECOTOOL CULTIVATOR

The Pecotool is a multi-purpose tool bar which can carry either 3 or 5 tines arranged as shown (Fig.2). When 5 tines are fitted, an extension beam is attached across the centre of the main beam and carries 2 of the leading tines.

The duck foot shares should be adjusted so that there is an overlap of between 2 and 4 cm to ensure adequate weed control. To arrange this, place the cultivator on level ground and mark the position of the wing tips of the central duck foot tine on the soil.

Roll the cultivator forward and adjust the 2 rear tines to overlap the mark the desired amount. Again mark the position of the wing tips, roll back the cultivator and adjust the position of the 2 remaining tines in a similar manner.

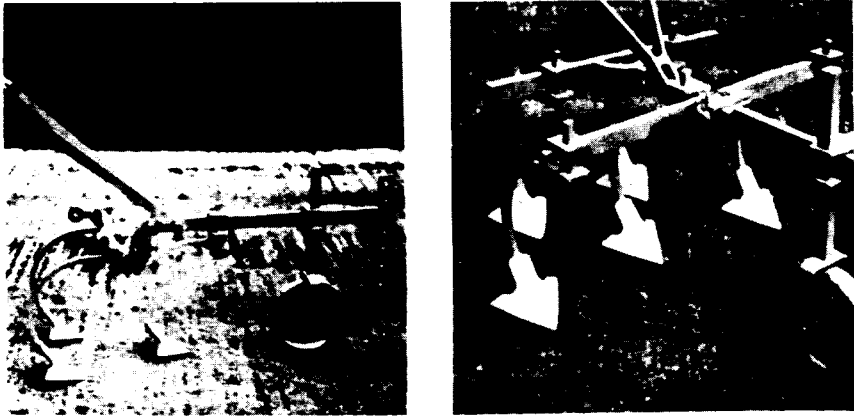


Fig. 2 The Pecotool can be fitted with 3 or 5 tines. The toolbar can also carry a mouldboard body, a ridger or a groundnut lifter. Source: Mathews and Pullen, 1976

THE TRIANGULAR TOOL FRAME

A triangular tool frame is made in Togo and Burkina Faso and is used in several other West African countries. It may also be fitted with various tools including either 3 or 5 duck foot tines for weeding operations (Fig.3). The 5 tines are arranged in three rows as shown and the spacing should be adjusted as described above.

THE HOUE MANGA

The Houe Manga has already been mentioned in Module 3.4.1. in the context that this implement may be used for preparing the seedbed by scarifying. It is also a very useful tool for weeding operations (Fig.5).

The working width of the implement may be easily altered by adjustment of the screw clamp holding the expanding arms.

It will normally be found best to fit duck foot shares, removing the reversible points which may have been used earlier on for scarifying.

Correct spacing of the tines is performed in a similar manner as described above on page 2. It is most important after changing the spacing of the tines, that they be re-aligned to be in the direction of work. Failure to do so can lead to distortion of the tine and consequently, expensive damage.



Fig. 5 The Houe Manga fitted with 3 duck foot shares. It is an easily adjustable tool for inter-row weeding.

Photo: Manuel Lecca