

Opico says the cultivators will work in various crops



## Opico tackles arable weeds with interrow cultivators

By Edward Mowbray

Opico has added a new range of interrow cultivators to its mechanical weeding options in an attempt to cut farmers' reliance on chemical controls.

The units are made by Austrian firm Hatzenbichler, which has been sending comb and grass harrows to the UK via Opico for 25 years, and the pair intend to focus their efforts on promoting the benefits of interrow cultivating to both conventional and organic growers.

These machines work by running a tine between every crop row to chop weeds just below the surface, and they're designed to be used over a number of passes throughout the growing season.

Interest in such systems is on the rise as consumers demand lower use of herbicide chemistry in food production and the chemicals themselves are dropping off the approval list at an alarming rate, too.

### Interrow cultivators

The range will officially be launched at Lamma 2020 and there is a plethora of custom-build options that depend on crop row width.

For combinable crops, which will be one of the key markets for Opico, widths start at 3m and run up to 18m, coming in mounted or semi-mounted and either rigid or folding configurations.

Rear-mounted units will form the majority of UK set-ups and row spacing choices start at 12.5cm and extend to 30cm.

Across the machine are parallelogram linkages housing a varying number of tines (determined by row spacing). The layout involves one tine per row, no matter the row width, so narrower row spacing requires more tines.

The legs consist of a Vibro spring tine that has a manually adjustable depth to avoid going too deep and disturbing crop roots. At the base of the tine is a 150mm duck foot share that is secured by roll pins; this slices through the soil to take down weeds just below the surface and limit immediate regrowth.

A hydraulically folding 16-row machine takes up to 180hp to pull, and Opico reckons speeds of about 8-12kph should be achievable, dependent on soil conditions.

### Cameras

There are two options for guiding the cultivators along the rows of crops; a Hatzenbichler steering headstock or the fancier Tillet and

Hague camera system. The machines can't be guided by GPS as any satellite drift would result in crops being destroyed.

Hatzenbichler's headstock uses two wheels that run on the ground to keep it steady and a double acting ram to side shift the cultivator along the rows.

There are three sizes of headstock to suit the cultivator's width – the standard 850kg model will fit a 6m unit. The benefit is that it can be taken off and used with other machines, such as comb harrows.

The Tillet and Hague cameras are mounted on each side of the implement to keep the tines away from drilled crops. It is possible to have up to eight cameras and it works by visual odometry that identifies plants and points, rather than via GPS.

Where the headland meets the land work, a Muller section-control-type system will lift pairs of parallelograms out of work. These operate via hydraulic valves and have 13 separate sections to avoid uprooting headland crops.

### Who will buy one?

Unsurprisingly, the bulk of users are organic producers who don't have the armoury of chemical products on offer to conventional growers. However, Opico is keen to tap into the maize, potato and sugar beet market, along with conventional arable producers.

A 6m, 36-row machine with 166mm spacings will cost £24,375, with an extra £10,756 for the camera option. ■



The Tillet and Hague interrow display