

# BREVET DE TECHNICIEN SUPÉRIEUR AGROÉQUIPEMENT



## ANGLAIS

Durée : 3 heures

Coefficient : 1

- L'usage du dictionnaire bilingue est autorisé
- L'usage de la calculatrice est interdit.

Ce sujet comporte 3 pages

Barème :	COMPTE-RENDU	:	12 points
	EXPRESSION ÉCRITE	:	7 points
	PRÉSENTATION, ORTHOGRAPHE, RÉDACTION	:	1 point

### NOTE IMPORTANTE :

Dès que le sujet de l'épreuve vous est remis, assurez-vous qu'il est complet en vérifiant le nombre de pages en votre possession.

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# Hopes are high as hoes reduce herbicide costs

From steerage hoes to automatic guidance hoes — the former introduced because there were no chemicals for weed control, the latter introduced to avoid the use of chemicals for weed control.

Mike Williams reports on the latest developments

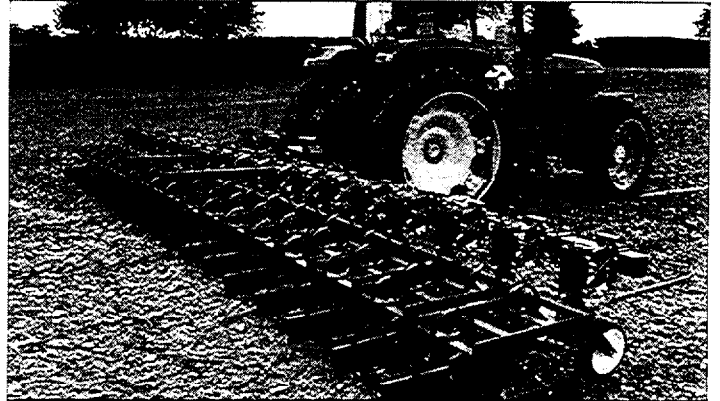
**T**RACTOR-MOUNTED hoes equipped with automatic guidance can be so accurate that users can expect to cut their herbicide application costs significantly. But the big buyers so far are farms growing vegetables and organic cereals, with sugar beet growers remaining reluctant to adopt the new technology.

Modern versions of this implement, which has its origins steeped in history and beyond, use a vision guidance system with special closed circuit TV cameras

providing pictures of the ground ahead of the hoe. These pictures are analysed by a computer, which identifies the plant rows and automatically steers the hoe blades between them.

Auto guidance systems are claimed to be capable of matching or even exceeding the accuracy of a skilled operator, but they maintain the same level of accuracy indefinitely and often at much faster working speeds.

The first two production models of the Robocrop hoe from



*An opportunity to save on herbicide costs? Garford Farm Machinery's Robocrop steerage hoe complete with automatic guidance system claims to do just that.*

Garford Farm Machinery became available last year, and both were sold in Norfolk — one to a large-scale vegetable grower and the other for use in sugar beet.

But sugar beet growers overall would appear to be slow to adopt the system. Of the 12 units sold this year, all but one are destined for use in vegetables.

"Vegetable growers are easily the biggest customers at this stage, and one large scale grower is now operating three of our machines," says Philip Garford. "But we are also getting a lot of interest from organic cereal growers with some of our machines being used in wheat and barley crops. The one we sold this year for use in sugar beet was to an organic grower."

The Robocrop uses a Robydome Electronics guidance system on a standard Garford hoe. Specifying the guidance system adds £7645 to the £9183 list price of a 12-row version — the most popular size.

The guidance system, which was developed almost 10 years ago at the Silsoe Research Institute, has been adapted for use with the hoe. Peter Watts, managing director of Suffolk-based Robydome, is delighted by its success.

"The two machines sold last

year did a lot of work and they performed very well," he says.

"We believe the guidance system could become a substantial part of our business."

The Robocrop's rival is the Danish built Thyregod TRV hoe, which is distributed in the UK by Kongskilde. Its vision guidance system was developed and built by the Eco Dan company.

Although available for three years in its home market, UK demonstrations did not start until last year but the machine is already attracting considerable interest according to Kongskilde's sales manager Steve Atkin.

"It is the performance that impresses people," he says. "For an experienced operator we would recommend setting the blades half an inch from the crop plants, although you can go even closer. Forward speed needs to be at least 4kph, and experienced operators are working at about 12kph. The accuracy is very good, and the hoe is ideal for organic growers or for anyone who wants to reduce the amount of herbicide they use."

The TRV hoe complete with the Eco Dan guidance system is priced at £14,850 for the 12-row version with six and 18-row sizes also available.

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I – COMPTE RENDU :

Rédiger en français le compte rendu (300 mots environ) de l'article (page 2/3)

II – EXPRESSION :

Rédiger en anglais (150 mots)

Si vous étiez maraîcher, seriez-vous prêt à investir dans du matériel sophistiqué ? (coût, respect de l'environnement, etc.)