



Horticultural
Development
Company

Grower summary

SF 108

Improving Strawberry Plant
Establishment In Used Beds

Annual Report 2010

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Only officially approved pesticides may be used in the UK. Approvals are normally granted only in relation to individual products and for specified uses. It is an offence to use non-approved products or to use approved products in a manner that does not comply with the statutory conditions of use, except where the crop or situation is the subject of an off-label extension of use.

Before using all pesticides check the approval status and conditions of use.

Read the label before use: use pesticides safely.

Further information

If you would like a copy of the full report, please email the HDC office (hdc@hdc.org.uk), quoting your HDC number, alternatively contact the HDC at the address below.

HDC
Stoneleigh Park
Kenilworth
Warwickshire
CV8 2TL

Tel – 0247 669 2051

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Headline

- A range of products that claim to improve crop establishment were trialled on two bare root everbearer strawberry varieties planted into once-used strawberry beds on light soil. No beneficial effects on crop growth or yield occurred on this site.

Background and expected deliverables

Most of the UK strawberry crop is still grown in plastic-covered raised beds in field soils. The soil is commonly fumigated and there is a strong desire to prolong the value of this investment into a second crop by replanting the beds. This saves costs and reduces the use of soil disinfectants.

Good plant establishment has a significant effect on yield. Strawberry growers are increasingly considering whether to continue producing in field soils or switch to soil-less substrate systems. Replanting of beds has become more problematic as soils on many farms are repeatedly used for strawberries.

Specific objectives are:

- To identify non-pesticide products that improve plant establishment of replanted everbearer crops into previously cropped raised beds in field soils.
- To compare the performance of these products with standard agronomic treatments.
- To quantify the establishment treatments on initial canopy development and on yield in July, August and September.
- To ascertain the financial worthiness of the treatments applied.

Summary of the project and main conclusions

Twelve products (Bio-Fungus Granules, Broadleaf P4, Broadleaf root dip, Humaroot SP, Omex Bio 18, Omex DP98, Plantmate Drench, Scotts Miracle Gro, Side forking, Standard feed solution 1:1:1 and Vaminoc S) were applied to bare root strawberry cvs Albion and Camarillo as they were planted into once-used beds on a light soil in Staffordshire in March 2009.

Two treatments initially hindered establishment. None improved canopy development over the control. Examination of the total yields showed no significant difference between any of the treatments. This corresponded with field canopy observations through picking.

Bare root everbearer varieties were chosen to provide the most challenging plant material for establishment. The plants were graded to size before planting but the rate of establishment within all plots was still variable. This indicates that runner uniformity is the greatest factor affecting overall establishment for the industry. The statistical analysis showed that the plant size variability, though unavoidable, was equally spread across treatments, therefore enabling effective comparison of the treatments. Root stimulating treatments may enable small improvements beyond the large variance in growth of bare root runners on some sites, but no effect was detected on this site.

Financial benefits

No treatment showed a significant improvement in growth or yield over the control. The trial will be repeated on a different soil type for 2010. Some treatments will also be adjusted to reflect trends noted in the 2009 trial.

Action points for growers

- There are none at this stage.