

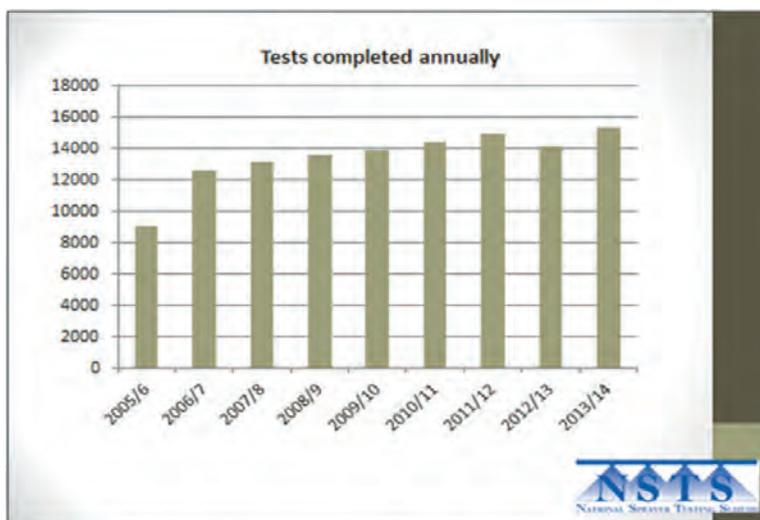
Sprayer testing in the UK – an overview of the National Sprayer Testing Scheme

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DOI 10.5073/jka.2015.449.0011

Sprayer testing commenced in the UK in 1997 when the Agricultural Engineers Association (AEA) launched their industry led testing scheme. AEA members from the sprayer manufacturing and importers sector highlighted the need for such a test, ensuring that application machinery was fit for purpose.

In 2003 the AEA scheme became the National Sprayer Testing Scheme (NSTS) and by the end of 2013 was testing over 15,500 pieces of pesticide application machinery annually. The NSTS is an annual requirement of the UK's major crop assurance, super market and grower protocols. Additionally NSTS has been delegated by the UK Government as the body to test application equipment in the UK to meet the requirements of the Sustainable Use Directive.



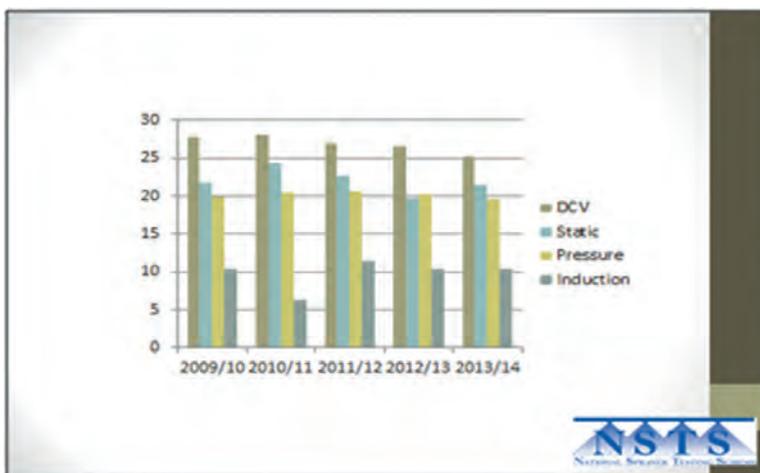
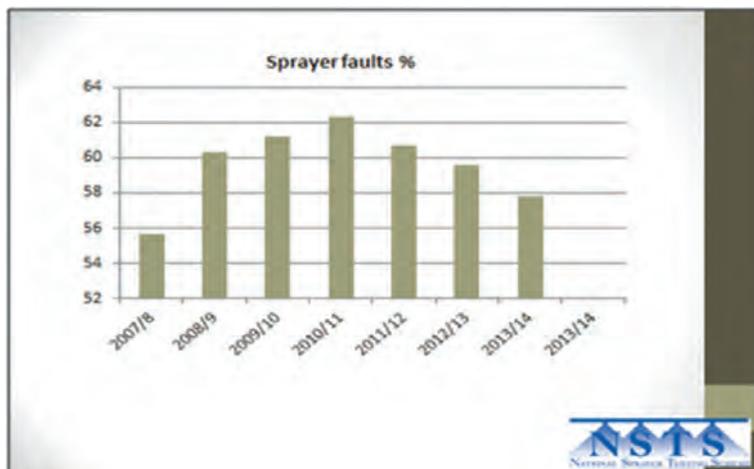
The standards employed in the scheme mirror those required by EN 13790 with additional items which increase the ability of the equipment to function correctly and apply pesticides accurately and on target while increasing safety for both the environment and the operator.

NSTS is available through a UK wide network of 213 Test Centres. These test centres employ machine examiners who have been trained and achieved the City & Guilds Level 3 Certificate of Competence in Sprayer Examining. The 579 examiners are required to attend annual examiner updates and take part in audits, all of which ensures that standards are being applied fairly and equitably throughout the network.

The NSTS has additional protocols which cover Granular Applicators, Fogging machines, Spray Trains and Aerial application and is working towards covering all the many types of equipment that will require testing as part of the SUD.

The results of the NSTS tests show that almost 58% of the machines have faults detected

at the time of the examination, with leaks and drips accounting for the majority of faults. The requirements of the test ensure that the machine returns to work with all the faults rectified. The last four years have shown a steady decline in the percentage of sprayers requiring rectification.



The NSTS test will continue to be an annual requirement for crop assurance, super market and grower's protocol's, with one of the annual tests satisfying the requirements of the SUD. NSTS has set standards for machines, examiners and procedures and offers growers a proven cost effective and meaningful examination of their application equipment.