

Technical Evaluation Record V3 Jan22



QUALIFICATION: Pesticides – PA3B Variable Geometry Boom Sprayer with Air Assistance	Qualification Code: 0216-51 (Ind)	
	Units: 122	
Assessor Name:	Technical Verifier Name:	
Assessor No: NEW? DOB:	Technical Verifier No:	
Assessor Email:	Start Time:	
Invoice To: (Include Centre name if applicable)	End Time:	
CRITERIA: (Please refer to the following pages and current Qualification Guidance)	PERFORMANCE EVALUATION (Circle):	JUSTIFICATION:
M/C test paper to check PA1 knowledge and specific industry best practice <i>(new assessors only)</i>	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	5 = Pass with 20/20 4 = Pass with 18/20 or 19/20 1 = Fail
Knowledge of H&S regulations and industry best practice. Carry out SSRA, COSHH and environmental assessment	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
Knowledge of range of applicators (including pump types, liquid/air flow, controls, components, induction systems)	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
Knowledge of machine preparation and safe driving considerations	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
Knowledge of operator protection, sealed cab/open platform and PPE requirements and standards	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
Knowledge of a range of nozzles appropriate to applicator and relevant nozzle chart interpretation	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
Knowledge of nozzle body and fan adjustments, including advantages and possible risks to crop/target	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
Interpretation of two appropriate product labels	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
Calibrate the applicator (without use of calibration sheet/aids). Complete calibration test paper	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
Complete calibration test paper	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	5 = Pass with 100% 4 = Pass with <100% 1 = Fail
Knowledge of drift reduction methods	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
Measure, mix and fill applicator. Carry out an application. Knowledge of site marking options	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
Knowledge of cleaning/decontamination/disposals. Complete a treatment record	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
Assessment techniques <i>(new assessors only)</i>	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
PERFORMANCE EVALUATION COLUMN TOTALS:		= TOTAL SCORE:
Result of Technical Evaluation (tick):	MET	TOTAL SCORE REQUIRED TO ACHIEVE ASSESSOR STATUS: (NB. ACHIEVED IN PERFORMANCE EVALUATION COLUMNS 4 & 5 ONLY) <i>If an existing PA Assessor then please adjust total score required to 48</i>
	NOT MET	
		56
ACTION PLAN FOR ASSESSOR:		
<i>Please continue on reverse if necessary</i>		
ASSESSOR COMMENTS:		
<i>Please continue on reverse if necessary</i>		
TECHNICAL VERIFIER SIGNATURE:		COST: £200 Half Day £300 Full Day
ASSESSOR SIGNATURE:		DATE:

TECHNICAL EVALUATION RECORD

0216-51 L2 Award in the Safe Application of Pesticides Using Variable Geometry Boom or Broadcast Sprayers (PA3)

Unit 122 Operating a Variable Geometry Boom Sprayer with Air Assistance (PA3B)

M/C test paper to check PA1 knowledge and specific industry best practice

- Minimum score of 18/20 achieved.
(Please note: this paper only needs to be completed by new PA assessors).

Knowledge of H&S regulations and industry best practice

Key principles and practical relevance:

- Health and Safety at Work etc. Act 1974 (HASAWA)
- Management of Health and Safety at Work Regulations 1999 (MHSWR)
- Provision and Use of Work Equipment Regulations 1998 (PUWER)
- Personal Protective Equipment at Work Regulations 1992 (PPE Regs)
- Control Of Substances Hazardous to Health Regulations (COSHH)
- The Health and Safety (First Aid) Regulations 1992
- Reporting of Injuries Diseases Dangerous Occurrence Regulations (RIDDOR)
- Wildlife and Countryside Act 1981
- Countryside and Rights of Way Act 2000

- Sustainable Use (PPP) regulations
- Pesticides Code of Practice
- 2 sources of industry best practice
- Operator certification
- Risk assessments
- Condition and guarding of equipment

Carry out COSHH assessment

- Using template provided or an approved template

Carry out SSRA

- Assessor to complete a Site Specific Risk Assessment, using provided template.
- Header and footer.
- Hazards and controls relative to site, task and equipment.

Carry out environmental assessment

- Environmental risks to site identified
- Methods to minimise risks explained.
- Additional risks not identified on site, (that may occur in typical assessment situations) to be discussed.

Knowledge of a range of applicators (including pump types, liquid/air flow, controls, components, induction systems)

Applicable to equipment used for the TE and questioning to cover knowledge of variations:

- Operating controls
- Applicator components
- Common pump types (must include Diaphragm and Piston)
- Liquid flow
- Air flow (if applicable)
- Operating differences between fixed forward speed and variable forward speed (rate controller) applicators

Knowledge of machine preparation and safe driving considerations

- Pre-use checks to prime mover
- Compatibility and security
- Safe driving
- Contact with obstacles (e.g. overhead power lines)

Knowledge of operator protection, sealed cab/open platform and PPE requirements and standards

- Operator protection – sealed cab
- Operator protection – open cab/canopy/platform
- CE and EN markings-relevance
- Coverall specifications –Type 4/5/6
- Glove specification
- Face shield
- Boot specification
- RPE – types and reasons

Knowledge of a range of nozzles appropriate to applicator and relevant nozzle chart interpretation

- Hollow cone
- Hollow cone air inclusion
- Flat fan
- TV to explain the 'rule of 4' in relation to calculating nozzle output (if unknown)
(Please note: Assessor to identify nozzle, explain when it would be used and interpret the markings. Additional detail can be obtained / interpreted from an appropriate nozzle chart.

Knowledge of nozzle body and fan adjustments, including advantages and possible risks to crop/target

- Nozzle body adjustments according to overall height of target or foliage density
- Fan pitch – larger volumes of air at lower fan speeds
- Large volumes of air can assist with spray penetrating canopy
- Low volumes of air may not allow for full coverage/penetration of canopy
- Large volumes of air have potential to cause excessive drift
- Large volumes of air could damage delicate fruit/berries.

Interpretation of two appropriate product labels

- Product label 1
- Product label 2

Calibrate the applicator (without use of calibration sheet/aids).

- Calibration method (carried out):
 - Application volume
 - Amount of water for area
 - Amount of pesticide for area
 - Amount of pesticide for full tank

Complete calibration test paper

- Calibration test paper successfully completed
Note to TV: The assessor is expected to complete all the calibration test paper exercises. A marking sheet range has been produced to allow for variations in methods used and rounding up/down.

Knowledge of drift reduction methods

- Weather conditions
- Canopy density
- Presence of natural/living windbreaks
- Direction of spraying
- Nozzle type and size
- Boom geometry
- Pressure
- Forward speed
- Fan speed
- Fan pitch
- Air flow direction

Carry out measuring and mixing.

- Suitable site selected.
- Correct PPE used
- Safe use of water supply
- Accurate measurement of water (allowing for pesticide volume) and pesticide.
- Read a range of different measuring vessels (to be read in millilitres and litres)
 - Large jug (water)
 - Small jug (chemical)
 - Cylinder
 - Knowledge of how to accurately measure powders/granules
- Correct cleaning procedure of pesticide measuring vessel.
- Avoidance of spillage. Drip tray used.

Carry out an application. Knowledge of site marking options

- Site marking options (to ensure accurate application)
- Safe and accurate application carried out
- Procedure for blocked nozzle during application
- Procedure for refilling during application

Knowledge of cleaning/decontamination/disposals

- Surplus dilute, disposal
- Washing procedure explained
- Washings, disposal
- Empty container/packaging, washing, storage and disposal (Crop Protection Association Best Practice Guide 'Container Cleaning' 2012)

Complete a treatment record

- Treatment record correctly completed

Assessment techniques

- Clear and concise questions/instructions
- Question/instruction relative to unit.
(Please note: this section only needs to be completed by new PA assessors).

Note: *If an existing PA assessor is adding this as a new unit, the M/C test paper and assessment technique sections do not need to be completed.*

Total score required (on front sheet) can be adjusted to 48.

The calibration test paper must be completed by all potential assessors.