Let us SPRAY

JON ALLBUTT questions the unfortunate tag of 'that nondescript piece of a small agricultural unit' for sprayers - and suggests what to look out for when buying new.

It seems to me we never give the choice of sprayer the same amount of thought as, say, choosing a new mower or tractor. The sprayer is often part of a package, or a nondescript piece of a small agricultural unit. Sometimes we even opt for something that is second hand and usually cheap!

All that has changed now; for we need to know so much more about the task of spraying, perhaps not out of choice, but because new legislation has required us to be properly trained. Now we look at our old sprayer with new eyes; there it sits in the yard or shoved into a corner, the pump still attached and not cleaned out since it was last used. What was it used for? Can't remember!

Now that we see the shortcomings of the unit we wonder how on earth we managed to get away with it. We now understand terms like calibration and spray quality, we can pick a nozzle to give the right output in litres per minute. In many cases the sprayer is, and always was, inadequate for the job and we appreciate the need for a unit that will meet the requirements of the Code of Practice. Our priority is to do the job quickly and accurately using a pressure and spray quality that will avoid drift problems - even if the wind speed is just a touch higher than it should be.

There are a number of sprayers available now with a range of different features. The problem is to choose the right features that will do the job within the budget.

SPECIFICATION FOR A NEW SPRAYER

1. A sprayer that will be compatible with a Cushman, tractor etc, and one that is easy to fit.
2. Controls that are positioned in such a way that you don't rick your neck when checking pressures or switching on and off.
3. A balancing valve on each boom control to stop a pressure surge when you switch one or more boom sections off in a narrow space.
4. A pump capacity to give from 250 to 1,100 litres per hectare at 2 bar pressure.
5. Diaphragm check valves for drip free spraying.
6. Nozzle triplets fitted to the boom to save fiddling with nozzle changes each time you change products and water volumes.
7. A selection of nozzles to give the wide range of outputs listed in 4), with an easy to follow reference chart!
8. Made of rugged construction with fittings that don't leak!
9. Bout markers to make an easy job of spraying irregular shapes accurately. Whoever heard of the perfect rectangular fairway or green?
10. A cage or basket to hold the pesticide safely and allow mixing away from the yard.
11. A fresh water bottle on the side for washing hands on site.
12. Available from a supplier who has a good, fast spares service.
13. Boom end guards to stop the inevitable damage to end nozzles on uneven ground.

The Hardi 300 Amenity Sprayer, mounted on a Cushman
Buying a new sprayer

‘...The sprayer needs the flexibility to apply widely different water volumes and travel over some very uneven ground...’

In amenity horticulture, and greenkeeping in particular, the sprayer needs the flexibility to apply widely different water volumes and travel over some very uneven ground. In making a decision you might use the specifications Page 29 as a guide, circulate it amongst suppliers and wait to see what they offer.

Allman have a range of sprayers to fit most vehicles, including the Cushman. They are often basic and need extras to make them flexible enough to cope with all turf situations. There are two ranges of nozzles available, high and low pressure, so be careful when ordering. Remember the objective is to have water volume output and spray quality specified on the label at the lowest pressure. Unless you specify, your sprayer is likely to be delivered with high pressure nozzles.

After many trials and discussions with greenkeepers, Hardi have just launched their new 300 Amenity Sprayer designed to fit the Cushman and incorporating all the above points. The interesting thing is that it is not an all-new sprayer with untried components, rather it used the best of their agricultural range put together to give an easy to operate machine of high quality. Hardi score a first by incorporating a bout marking system on a sprayer priced at under £2,000. Hardi offer several pump options, the most useful being the RP*** Roller Vane unit. This has several advantages in that it is easy to put on and off, simple to clean and delivers more than 1,000 litres per hectare at low/mid pressure. Ideal for spraying wormkiller, fungicides, wetters, fertilisers and soil conditioners.

For those sites without a Cushman, Hardi offer the BL300 to the same spec to fit any tractor. With minor modifications, it may also be used as a trailed or skid mounted unit.

Where larger sites suggest a bigger unit, look at the Hardi NK range with a larger tank and boom, together with the same controls.

Electronic controls are available as an optional extra, enabling these to be brought into the cab for easier use and greater safety.

At the most recent IOG Show, Ransomes were showing a new sprayer from the USA, designed to fit the Cushman. At that time it had not been completed for the UK market, having no operator handbook or details of pump output and nozzles. I expect these to all be well sorted out in time for the new spraying season.

• The author is a technical consultant to the leisure and amenity industry. He is perhaps best known to greenkeepers as a technical trainer of those who apply pesticides, and in assisting with COSHH assessments.