

Licence to till

An allotment holder's guide to ROTAVATING

By David Holt – East Finchley Allotments, plot C6

In my teens most of my contemporaries were going through the usual testosterone-fuelled motorbike phase, but I just had to be that bit different, and as a result I have been meddling with rotary cultivators, or “rotavators”, on and off for over thirty years. I still meddle with them now; so let me share with you a few of my personal thoughts and opinions as to their use, abuse and application.

Why rotavate?

Obvious, isn't it? A rotavator will save you lots of backache and time. In good conditions you can produce a fully cultivated plot all ready for planting very quickly. You can also use a rotavator to incorporate manure, compost, green manure, fertilizer, soil conditioner, lime etc into your soil, and they do a superb job of this. Running the machine at a shallow depth you can also hoe between rows of crops with your rotavator, again saving time during the busy growing season. They can be extremely useful machines.

Now here's the bad news, but it tends to be my golden rule:

Never rotavate uncultivated grassy virgin ground. Yes, it can be done, and some of the machines in my collection, at up to 16 horsepower, will happily churn away into a wild, un-tamed mess of a plot and eventually produce a fine tilth; but the couch grass, the mare's tails, bindweed, nettles, docks, creeping thistle and other sundry curses, will come back to haunt you in a matter of days, a million fold, and swamp your plot with weeds. Also, your little 3hp domestic machine will never cope with this type of heavy duty work and you'll end up wrecking it. When breaking into a virgin plot you must be prepared dig it over first and remove, or completely bury as much of the grass and weeds as you can. I'm afraid there is no alternative to this initial back-breaking work, other than a plough. You might be lucky: some local Councils are prepared to plough, especially when establishing a new allotment site, but if not - it's out with that spade!

But now the good news:

Once you have initially cleared and dug your plot over, you can then use your rotavator to cultivate it every year, and, providing the soil is good and you keep the weeds down, your rotavator will make the job quick and easy every time.

Machine types:

The most common machines that are suitable for the allotment holder are the simple “Merry Tiller” type. That is: a set of rotating blades driven via a vee-belt drive from a small 3 to 5hp petrol engine on a frame above. The operator stands behind the machine and guides it along by the use of handlebars onto which are mounted the controls. (I used to call these machines “back-scratchers”.) They are good for light work, but they have no powered wheels and can “grab” the soil in heavy conditions and bounce around, or go racing across the top. You will need to hang on to the handlebars very firmly, and because you follow the machine you also end up walking all over the lovely tilth you have just created. But they are relatively economical to purchase and run, and are, in reality, as much as an allotment holder would ever need.

For bigger plots and tougher work you would be better advised to go for a machine with powered wheels. The advantage here being that the machine powers itself into the work and all you have to do is steer it. They come in various sizes, from approximately 3 to 15 hp and can often have other attachments available, such as a mower, plough, ridger etc. These machines tend to be of stronger construction and are able to handle heavier work, but all this comes at a price and you can expect to pay a lot more money.

2.

Finally: tractor mounted machines for both compact and full-size tractors are also available, but these won't apply to many allotment holders.

Can I warrant the expense of buying a rotavator?

Ask yourself a basic question: how much ground do you have to till? If it's only half a plot save your money and don't bother – the exercise will do you more good. A full plot? Maybe a small machine; but is the outlay of hundreds of pounds really worth it? If you have two plots or more then a rotavator might well be worth considering, but again, don't be tempted to buy something big, industrial and costly which then only gets used a couple of times a year.

Here's a suggestion which has been implemented successfully by some members at our site here in East Finchley: why not club together with a few neighbouring plot holders and buy a machine between you? You can use it in turn during the season and share the cost of purchase and maintenance. Everyone benefits at a fraction of the cost.

Also, some allotment societies are generous enough buy a machine and then hire it out to plot holders at cost, with the user providing the fuel. It's another good idea, but the machine must be safe, easy to use, properly maintained and securely stored.

If you do take the plunge and decide to buy a machine you will also need to know a bit of basic engine maintenance: oil levels, lubrication etc., and also you will have to have safe and secure storage for it. Be warned: they are *very* nickable, as we have found out to our cost!

Cost.

I've been researching the prices of new machines via the internet and here's a rough guide from August 2009 – it may make you think twice! You can buy small mains electric machines from £70 or so, but they are really little more than a powered hoe. Such machines as the Mantis Mini Cultivator will have limited use on a large allotment and yet you will still pay over £250 for one. Larger and more practical Ardisam, Honda and Centurion machines will cost well over £300. Even bigger Husqvarna and Honda machines will be in the region of £500 to £600, and bear in mind none of the above has powered wheels. If you want powered wheels and higher capacity then Husqvarna, Honda and Grillo have machines varying from £700 to £1,700. Phew!

Second hand? Why not? You will get a machine for less than the new price, but buyer beware: you have no way of knowing how much use the machine has had, if it has been abused, if it has been properly maintained, how old it is, etc. It may also need some serious maintenance or repair in order to make it reliable.

Hire? Most tool hire shops will have a small range of rotavators for hire, and they will all be modern machines of the types described above. Again, internet research has revealed varying rates from £40 per day and £80 per week for small machines, up to £99 per day and £199 per week for the larger machines. If hiring a rotavator is your preference why not club together with neighbours and again share the cost?

Some tips and hints:

Do

1. Carefully consider the cost involved. Is it worth it for what you gain?
2. When operating a rotavator use gloves, really stout boots (mine have steel toecaps) and ear protection if sensitive.
3. Keep well clear of the rotating blades at all times.
4. Keep children away from the machine.
5. Ensure your machine is properly maintained. Repairs and spare parts can be very expensive.
6. Ensure all bricks, rubble and solid objects are removed from the soil before you start, otherwise you might damage your machine.
7. Take care when rotavating on a slope. Work across the slope if you can, rather than up and down.

Don't

1. Rotavate virgin ground (see above).
2. Try to do too much at once. Get used to your machine gradually.
3. Ever adjust the machine with the engine still running. You are in danger of serious injury.

4. Take risks with the machine – you'll end up in casualty. Follow manufacturer's instructions.
5. Over-tax the power of the machine. If the ground is heavy, work it in several passes, increasing the depth of cut each time.
6. Rotavate in autumn unless you plan to leave the ground very rough. If it is too fine it will turn into mud over winter and will then be capped when it dries out in spring.

To sum up:

Rotavators can be a great help to the busy plot holder with lots of ground to till and they can save you much time in the spring, but do think carefully before you buy one – good machines are expensive, so consider clubbing together to buy or hire. Don't expect miracles, because even the toughest rotavators have their limits, and some machines can be rather over-sold by their dealers! Do plenty of research and make sure you choose the machine best suited to your individual needs.

I don't endorse any particular make of machine, however, that said, I have only ever used *Howard* horticultural machines because they are the most robust and powerful of them all, especially the legendary *Howard GEM*. Howard Rotavators were the market leaders for decades, but sadly they slid into history in the 1980s.



Figure: My own collection of vintage Howards at an old-time farming and craft fair in Essex.

Good luck and happy tillage!

Links:

www.eastfinchleyallotments.co.uk

www.vhgmc.co.uk

www.gardenmachineryworld.co.uk