holistic Orchard Network Online Community Grow Organic Apples

Home > Out to the Orchard > Sensible Equipment > Topic

Advanced

## Airblast sprayer, time to get one?

Posted by <u>Nathaniel Bouman</u> Forum List <u>Message List New Topic</u> <u>Nathaniel Bouman</u> <u>Airblast sprayer, time to get one?</u> March 04, 2021 05:58AM L found a good deal on a 500g Duran

Registered: 9 years ago Posts: 81

FORUM

I found a good deal on a 500g Durand airblast sprayer and now that I have access to a 75 hp tractor I'm sorely tempted to get it. My little 23 hp Kubota and 200g Rears Pul Tank worked great but now that the trees are 5 years old it just takes forever to spray. More than a day to do a full cover.

I've got 500 trees on b.118 on 18' in row and 24' between rows. Huge variation in size depending on variety. Golden Russet at 20+ feet. Dabinet are puny. Average over the whole orchard is probably 14'. It seems like most growers here use the tank and wand technique but I'm not sure how to keep up with Surround sprays and all that and still have time to do all the other work needed in the orchard. An airblast sprayer (even the old, used one I'm eyeing) is a huge financial commitment for me...but the time saving would be amazing.

Would love to hear anyone's thoughts on airblast sprayers.

Nat Bouman Growing cider varieties in Zone 5b On B.118 at 18X24 Susquehanna County, Pennsylvania <u>Reply Quote</u> <u>Brittany Kordick</u> <u>Re: Airblast sprayer, time to get one?</u> March 04, 2021 03:48PM Hi Nat,

Registered: 4 years ago Posts: 209

We found ourselves in your situation three years ago. It took us days to get all our trees sprayed by hand, plus two people to do the job, one driver and one sprayer. We bought a used 100 gal Tifone with a three point hitch, and have been pretty pleased overall. Given what we spray, however, we are not able to use the airblast as efficiently as a conventional grower, spraying two sides at once, skipping aisles, etc. Most of our spray mixes contain EM-1 bacteria, and as other threads in this forum have discussed, there are pressure concerns with regard to damaging/killing the beneficial bacteria you're trying to get out there. We also typically want to spray everything to runoff, so not just a quick concentrate run or fine coverage that the average conventional grower is going for with their airblast.

Our solution has been to go up and down each side of the tree aisle, typically in lowest gear, emitting spray only from one side of the airblast (our tractor is also only 30 hp, so pressure is not great with both sides open anyway). I'm also running the sprayer pump at 200 psi for bacteria-containing sprays, which may even be pushing it, pressure wise. If I'm spraying lime sulfur, copper, or anything else that is standalone, things become slightly more efficient. We also put a handwand attachment on our airblast, so we can switch to that for small trees, where airblast would be a complete waste. It now takes us about a day and a half to do our 1,800 MM111 trees, with one day's worth of airblast getting our 11 year-old 1,000 tree orchard done, then another half a day to get all the residual hand stuff done in our newly planted 800 tree orchard.

Another thing to think about: efficient tank filling. If you're planning on using a garden hose with normal pressure, the benefits of a big airblast may be negated. We took a page from some area conventional growers' playbooks; they often set up pumps in creeks to keep a water cistern filled, then just position the airblast tank underneath a large outlet and dump water in to fill the tank very quickly. We don't have a natural water source, but built a wooden platform about 6 feet high, put a 275 gallon IBC tote on top, and let the hose run in to keep it filled while we spray (need to install a float valve to make this overfill-proof, but haven't gotten around to it). We have a 2 inch pipe outlet running out the bottom, so we can open up the valve on the water tote and dump water in quickly, to fill our 100 gallon tank in four minutes or so, and be on our way back out to spray again.

One limiting factor for us is the 100 gal capacity of the sprayer. We have to fill up 14 times per spray, which is very inefficient, but our orchard rows are very tight, particularly where they meet the fence. I would never be able to make my turns with a larger pull-behind unit. Looking forward to expanding our fence line when we need to replace our deer mesh in another year or so, being able to afford a more powerful tractor, and maybe getting to the point where an upgrade to a larger pull behind airblast makes sense.

We also have trees of varying sizes, even in our fully grown orchard, and one nice thing about having the airblast on a three-point hitch is that I can raise and lower the sprayer to finetune the spray even more. For example, if I've got a few small trees, I lower the sprayer so that the trees and ground get all the benefits of the EM-1, oils, etc. I'm spraying, rather than having most of it go up into the atmosphere, since there isn't a high canopy to catch all the good stuff I blast high up into the bigger trees.

Hope that helps.

Kordick Family Farm Westfield, NC Edited 1 time(s). Last edit at 03/04/2021 03:56PM by Brittany Kordick.

 Reply Quote
 Registered: 6 years ago

 Josh Willis
 Registered: 6 years ago

 April 03, 2021 08:09AM
 Posts: 133

 Hi Brittany,
 You mentioned other posts that discuss "pressure concerns with regard to damaging/killing the beneficial bacteria". I missed those completely and can't find them. Would you mind linking them, or briefly summarizing the salient points (esp. what PSI we are talking about here), if you have a moment? (I'm looking at our mister/blower now...)

Earthworks Zone 7a in West-Central MD Non-commercial, ~100 fruit trees, dwarf to MM106 <u>Reply Quote</u> <u>Brittany Kordick</u> <u>Re: Airblast sprayer, time to get one?</u> April 03, 2021 02:17PM Hi Josh,

Registered: 4 years ago Posts: 209

Sure thing -- there may be more minor allusions to the effects of sprayer psi on beneficial microbes sporadically throughout the forum, but for the gist, start at "Out to the Orchard," then go into "Arboreal Microbes." You should see a thread entitled "Sprayer pressure impact on microbes?" Happy reading and good luck!

-Brittany

<u>Kordick Family Farm</u> Westfield, NC Zone 7a <u>Reply Quote</u> <u>Newer Topic Older Topic</u> <u>Print View RSS</u> Sorry, only registered users may post in this forum.

Click here to login

This forum is powered by Phorum.

Zone 7a

thank you! cheers, Josh