

Feature Story



7 tips to calibrate your orchard sprayer

Calibrating a sprayer is part of the crop protection product application process. But recent research done by ADAPTIV and the United States Department of Agriculture (USDA) has shown that not all sprayers can be calibrated the same way.

“Every tractor is different and every sprayer is different,” said Matt Strmiska, owner and founder of ADAPTIV. “What works for one sprayer may not work for another.”

ADAPTIV specializes in helping growers optimize the impact of their product applications by correctly calibrating their equipment. The company leads training sessions that provide hands-on experience for applicators and operators. There is a short classroom session that walks attendees through the five years of research ADAPTIV has conducted with the USDA, which is followed by several hours of hands-on practice to achieve ideal application levels on an operations’ equipment.

Below are seven tips from a recent clinic sponsored by BASF at Capay Farms:

- >> Always use ceramic nozzles. Ceramic nozzles can last between 90 and 200 times longer than brass or aluminum nozzles. Strmiska suggests investing in higher quality nozzles to get a better application for a longer period of time. According to Strmiska, if you take care of the nozzles properly, it is easy to reach the 200 mark.
- >> Run clean water through the tank after every application. Taking the extra time to run clean water through the tank after every application shift can keep equipment clean and stops material from hardening in the lines and nozzles. Clogged nozzles don’t spray properly and are difficult to clean by hand, according to Strmiska. Running water through the lines also prevents material from dripping back into the tank, which could interfere with the next application.
- >> Hit the correct saturation level with each spray. Too much product means runoff will occur, wasting product and money; too little product reaching the target could impact the yield quality. At the clinic, Strmiska uses water sensitive papers and plumbing tubes to show applicators what saturation level is occurring at each level of the tree.
- >> Slow and steady wins the race. A slower application speed maintains a more consistent saturation level. Driving two miles per hour is the ideal speed for product applications. Just make sure your speedometer is correct!
- >> Know what kind of air you are spraying in. There are two types of air that is created from sprayer fans: slow and turbulent, and fast and sheer. Different air types work better for different crops, and the conditions can

For more information contact:

Barbara Aguiar
BASF Corporation
Tel: (919) 547-2305
E-mail: barbara.aguiar@basf.com

change day-to-day. Strmiska says a sprayer's one job is to move air. You need to displace the air around a tree to add air carrying the product. Smaller droplets are more difficult to get up to the top of trees.

>> Water pH is the most important part of mixing chemicals. Check the product label for the pH level required for each product. This will also tell you which chemistries can be applied together.

>> Use test strips or a meter to gauge the pH of the water you are using to mix products. Always read and follow label directions. Use excellent chemistries. Since getting product to the very tops of trees can be a challenge, it is important to apply the very best chemistries to control yield-robbing insects and diseases. BASF creates chemistries that protect yield quality and can improve the overall health of trees. To learn more, visit www.GrowSmartAlmonds.com or contact your local BASF representative.