

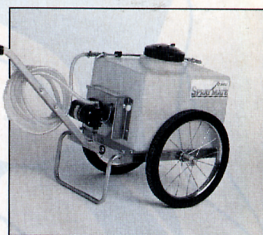
ing rootstocks to keep them small, are all standards. Left on their own, they would grow 20 or more feet tall, but by dint of hard pruning, I have managed to keep their crowns at a maximum height of 13 feet. Their girth, though, is prodigious. My 'Porter', whose yellow fruits are, according to the *Fanny Farmer Cookbook*, the best apples for pie, is now some 40 feet across. To spray it means reaching both high and wide.

I quickly discovered how perilous it is to climb up a stepladder lugging a cylindrical tank and then trying to reach the topmost foliage with the spray, not to mention mixing endless batches of spray in a small-capacity tank. Since then, I have been through three different sprayers, each one larger and more expensive than its predecessor. I don't wish to give the impression that these are the only choices available to gardeners, because there are many other models and manufacturers. But these three, I think, nicely illustrate the range of options with which to do serious spraying.

My first purchase was a **Solo knapsack sprayer**. This is a backpack-type sprayer that comes with a pair of padded nylon shoulder straps and resembles a watertight version of a hiker's pack basket. Model 425 has a four-gallon white polyethylene tank mounted on a lightweight tubular metal frame. Empty it

weighs only 9.1 pounds, but filled it is slightly over 40. Nevertheless, the design is such that this is a surprisingly comfortable load. The piston pump that projects up into the center of the tank generates a maximum pressure of 90 psi (pounds per square inch), although the attached regulator can be adjusted to give pressures of 15, 30, 45, and 60 psi. The pressure is generated by a metal lever or pump arm, roughly 18 inches long, that projects forward by the user's

left hip. For those who would rather hold the spray wand in their left hand and pump with their right, it can be unbolted and moved to the other side of the tank. Eight or 10 brisk strokes are enough to bring full pressure to the nozzle. Keeping the pressure up is then simply a matter of slowly raising and lowering the pump arm as you spray.



Mantis Spray Mate 12-gallon battery-powered sprayer



MacKissic Mighty Mac model PS 322T 22-gallon gasoline-powered sprayer

