With soybean rust having broached U.S. borders, spraying capacity is leaping to the top of the priority list for many producers. Thankfully, you'll have a wide range of choices from which to ramp up your capacity and performance.

In this 2005 sprayer roundup we've profiled some of the newest and most technologically up-to-date spraying equipment available in the U.S.

Apache's performance enhancements on its 2005 line include design updates to the hydraulic, fuel, cooling intake and exhaust systems, as well as an all-new custom cab with wrap-around glass and ergonomic controls. The 2005 line is available in tank sizes ranging from 500 gal. to 1,200 gal.

Great Plains expands its sprayer line with the TS Series, which features a 1,000-gal. trailer sprayer equipped with a 60-ft. front-fold boom. The five-section boom is fully suspended and the elevator has a full 42-in. of travel for infinite boom height adjustments. The control panel is now centralized in the front of the unit, and utilizes a Raven 450 automatic rate controller.

Sprague's 7000 series represents the largest engine and tank capacities now available from AGCO. The 174 hp Perkins 1106C diesel engine features an air-cooled, waste-gated turbocharger. The spray system has been redesigned for greater capacity, stability and durability, and is available in either 725-gal. poly or 660-gal. stainless steel tanks. The centrifugal hydraulic-driven pump has a maximum output of 85 gpm. The 60/80 boom also features full boom tip breakaways and retractable fold-over tips.

GVM's Predator HC67 features a 1,000-gal. stainless steel elliptical tank, 185 hp Cummins diesel engine and a dry/liquid combo option. The Allison 2000 series, five-speed transmission is capable of speeds up to 38 mph in fifth gear overdrive. Predator also features a 90-gal. poly fuel tank, a 50-gal. side-mount rinse hydraulic reservoir and a power adjust axle with 120- to 144-in. row spacings and up to 50 in. of crop clearance. The John Deere 90 series cab offers a full tread platform and rear air-fold ladder.

Redball's standardized features on every sprayer model have resulted in the Value-Line high-clearance sprayers. The 550 3-point X-Series, 555 3-point, and 565 and 570 trailer sprayers feature tank capacities from 300 gal. to 1,200 gal. All units feature 2-in. Ace
hydraulic centrifugal pumps, clean-water rinse tanks, fresh-water safety tanks (except the 555), TeeJet electric ball valves and Raven or TeeJet controllers.

John Deere's 4720, building on the 4710, offers a larger, 225-hp, 6.8-liter engine and increased low-end torque for tough field conditions. Operator updates include speed range and throttle controls on the hydro handle, CommandARM and auto air spring adjust. The index boom section allows operators to better manage inconsistent field and crop conditions. The units retain the patented boom suspension system while offering increased field speeds and optional boom presets.

Demco's Conquest, a 1,600-gal. pull-type sprayer, offers a formed-steel, compact frame for enhanced maneuverability and visibility, control valve work station, poly baffle, flange fittings and a 160-gal. rinse system. Optional features include single or dual wheels and booms from 60 to 90 ft.

Hiniker introduces its Century 1,000/1,300 gal.-trailer sprayers with mid-mounted rear-fold booms. The over-the-top gooseneck hitch allows the entire boom to be mid-mounted. Other features include higher field speeds, improved boom ride and spray nozzle visibility, shorter wheel base for improved tracking, and rear mounted fill plumbing for easy nurse vehicle access. Available boom sizes are 80 ft. or 90 ft. with full hydraulic fold.

The MaxCharge K-450 electrostatic sprayer from ESS offers optimized air-assist with high levels of electrostatic spray charge. Other features include high-flow electrostatic nozzles with higher liquid flow rates of 150-190 ml/min., lobed-blower air compressor technology, tubular aluminum spray booms and coverage of 30 acres or more from a single tank fill. The unit is available with 40-72 nozzles on booms from 36 ft. to 66 ft.

The Miller Nitro N2, with an 800 gal. tank, is now more compact. The N2 has 50 in. of underbody crop clearance, an extra-wide front-mounted boom and 72-120-in. wheel setting widths. Manual adjustment is standard with optional hydraulics. HydraFlex boom sizes range from 60 ft. to 90 ft. The N2 is powered by a Cummins 205 hp Tier II engine, twin Eaton hydrostatic pumps and Poclain three-speed, 4wd wheel motors.

Case IH has integrated its rear-engine configuration into the SPX3310 Patriot sprayer. The central placement of the 1,000-gal., stainless steel tank has been designed for more even weight distribution, earlier entry into wet fields, less compaction, lower rolling resistance, quieter operation and more efficient air conditioning. Adjustable 60/80-ft. booms are available in five- or six-section configurations, which can be equipped with the optional AIM Command spray system.

Summers Manufacturing's Ultimate NT is designed to reduce drift and is available with a 1,000 gal. or 1500-gal. tank and a self-leveling hydraulic-fold boom with 18- to 66-in. hydraulic height adjustment range. All field functions operate from a hydraulic remote.
An optional 200-gal. rinse tank can be used as a second spray tank when the sprayer is equipped with a dual-boom system.

Bestway's 1,600-gal. Field-Pro III 1600, with its 90-ft. boom, is capable of covering 870 acres in a 10-hour day. The unit offers a fully adjustable, 120- to 144-in. axle that accommodates narrow and non-standard row spacings, with wings adjustable to any width down to 72 in. Other features include oversized radial tires and hydraulic accumulator boom suspension.

Unverferth's larger-sized Top Air booms for 2005 feature front-folding 132-, 120- and 110-ft. working widths teamed with the model TA 1600 sprayer. A narrow 12-ft. transport width is designed for easier maneuvering on roadways. The triangular-shaped, three-dimensional boom design adds strength and durability, while ball valves are mounted on the wing sections for faster spraying response and greater accuracy.

Hardi's 1,500-gal. Commander trailer sprayer is available with either the 80- to 100-ft. Eagle, or 80- to 132-ft. force, hydraulic front-fold booms. Both boom systems are operated remotely. The unit also features four unique coil spring suspended axle systems, 100-gal. flush system, 4-in. boom pressure gauge and in-line boom pressure filters. The Commander 1500 is also available with either the Hardi diaphragm or Ace centrifugal pump systems.

Hagie's next-generation STS16 sprayer is designed for custom applicators and large farming operations, and features a 1,600-gal. single tank design. The front-mounted UpFront boom provides a full tip-to-tip view. The tri-boom design allows for 60-, 80- and 90-ft. width versatility with the same boom, and is adjustable 30[THORN] both up and down. The unit also features 72 in. of under-frame clearance. A rear-mounted electronic Cummins 5.9L QSB 275 hp turbo-charged engine powers the hydrostatic Hagie X-Drive system.

Wylie Manufacturing's 80- or 90-ft. Tilt Wyng boom is mounted on a 1,000-, 1,250- or 1,600-gal. spray trailer. The unit can fold one side while the cylinder keeps the boom level, allowing the opposite side to continue spraying. Breakaways can be folded in to allow for 58-ft. boom spraying at the desired height. Standard features include a 25[THORN] boom tilt, six section boom plumbing and heavy-duty tubular steel construction. The Tilt Wyng can also be mounted on several styles of 1,000-gal. spray trailers.

Is your sprayer up to snuff against the weed and disease challenges this season? There are plenty of resources available to help you sort out the right sprayer options for your operation. Consider these sources to get you started: The University of Minnesota, www.extension.umn.edu/cropnews ; University of Illinois, http://weeds.cropsci.uiuc.edu ; Ohio State Ohioline, http://ohioline.osu.edu/lines/acrop.html ; Purdue University Agronomy Extension, www.agry.purdue.edu/Ext ; and Iowa State University, www.weeds.iastate.edu. 