Better Yield, Better Crop
Larry Standage has reaped all the typical benefits of converting to drip irrigation on his onions including less use of water, fertilizer and labor, increased yields, and reduced runoff. But the most important benefit is that Standage builds customer loyalty as a result of a higher quality, more uniform crop. “The contents of each 50 pound bag of onions is superior because the crop is more uniform in size, shape and color, thus the customer is more pleased. I use drip to keep my customers coming back.”

Standage, who farms along with his father Dorrance and son Joseph, began experimenting with drip in 1999 as part of continuous efforts to find better ways to farm. “Government regulators were getting serious about reducing runoff from farms, and we felt this was important.” Half his acreage is in onions which are rotated with corn, wheat and sugarbeets. He purchased three pivots to begin upgrading from flood, but disease problems made him keep looking. He had been watching some of the early, local drip pioneers in Vale, Nyssa and Jamison, and was wondering who would help him with the learning curve if that’s the direction he chose. Then he met Brian Andersen, owner of Clearwater Supply, at a local show.

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“Design and Installation Made Easy
Today half of Standage’s onions are grown with drip. Since crops are rotated on each field, the portable drip system is custom designed each year. This could be confusing, but Clearwater makes it easy by supplying him with a new “Design and Installation Manual” for each field with all the pertinent data. In addition, Clearwater’s Jim Klauzer has set him up with moisture sensors which, together with ET data, help him determine how many hours to irrigate, and when. They still look at crop color and visual appearance to decide when to irrigate, but have learned that moisture sensor readings of about 30 centibars coincides with a crop appearance that typically triggers an irrigation event. “All this helps save water – otherwise, we’d probably over-irrigate.”

Benefits of Drip on Onions:
• Improved crop uniformity in size, shape and color
• Increased yield, especially in marginal fields
• Improved stress resistance
• Reduced runoff
• Reduced water usage
• Reduced fertilizer usage
• Reduced labor
• Improved field accessibility

Standage Farms, Inc.
Vale, Oregon

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But equally important is that it improves the crop, too. Although yields vary from year to year, drip always outperforms flood or sprinklers in marginal fields, and has never performed worse in good fields. “Drip nurtures a healthier, stronger plant, which really shows up during extreme heat events,” explains Standage. “Drip also creates an advantage for cultural activities during the growing season since the furrows are always dry as opposed to flood, which always leaves wet spots. The root system is more robust which prevents stress, and uniformity of water application translates into uniformity of crop. Considering the weather we had this season, this drip field is incredibly uniform. This is a huge advantage for our customers, and even in our own packing sheds, because variable size, shape and color creates problems in both packing and marketing.”

**Drip Uses Less Fertilizer**
Drip also allows spoon feeding of fertilizers. Pre-plant fertilizers are applied in the fall according to yearly soil tests, but in-season needs are supplied through the drip. “We use 30% less fertilizer with drip, and with recent fertilizer costs tripling from $.18 per pound to over $.50 per pound, the savings are significant.” To keep the lines clean, chlorine is injected late in the season to achieve 3 ppm total chlorine at the ends of the lines, and then the lines are thoroughly flushed before retrieval.

**Durable, Quality Tape**
Clearwater supplies Standage with Aqua-Traxx premium 6 mil drip tape from Toro Micro-Irrigation with a flow of .22 gpm/100 feet. Outlets are spaced 12" apart, and lines 42" apart to achieve an application rate of about .06 inches per hour. In Standage’s experience, the best wetting pattern is achieved with a 12 hour set, with intervals between irrigations determined by weather and sensors. Since the tape is installed after the onion seeds are planted, and supplies the moisture for germination, it is critical that the tape functions properly. “The 6 mil Aqua-Traxx is tough and durable and doesn’t break or have problems like other tapes. As any drip farmer knows, once you have a problem with tape in the field, there is nothing you can do to correct it, so it’s important to get it right from the start.”

Klauzer has been impressed with Toro’s product stewardship from both the factory and the local District Manager, Jon Small. “Toro’s policy is to be on site within 24 hours if a problem is experienced, whether it’s our fault or not,” says Small. “When I get that phone call, it becomes priority number one to get it taken care of.” Klauzer is also impressed with Toro’s response should a factory issue be discovered. “It is clear that the company cares about its product, its reputation and its customers.” As does Larry Standage.

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