

# Washington

## Q&A: Falling numbers

By **MATTHEW WEAVER**  
Capital Press

**• Why is the industry standard 300?** Soft white wheat buyers in Japan, South Korea, Indonesia, Thailand, China, Taiwan, Singapore, Malaysia, Sri Lanka, Guatemala, Chile, Peru and Yemen require a minimum of 300 for the products they make, said Ty Jessup, marketing manager for Central Washington Grain Growers in Waterville, Wash., and a member of the Washington Grain Commission.

The Philippines — the biggest buyer of white wheat — requires a minimum of 320. Destinations that require 300 or more typically buy based on wheat quality, Jessup said. Buyers accepting falling numbers below 300 include Egypt and feed wheat destinations, which typically buy based on price.

**• Will buyers accept lower falling numbers?** “That will decrease the reputation we have in the Pacific Northwest and take away the differentiation we have for high quality,” Jessup said. “If we end up losing that distinction, all of a sudden instead of selling premium wheat, you just become part of the price culture and you’re going to have to be competitive with price to market your grain.”

**• What made 2016 so different?** Falling number problems last year were more widespread, with lower lows and lower highs, Jessup said. Typically, lows are in the 250-280 range, and highs are 400-450. In 2016, the highs were 330 to 350 and low readings varied.

The problem has occurred before, but it was less widespread, and exporters were better able to blend wheat with low falling numbers with wheat that had higher falling numbers, Jessup said. That’s harder to do when more wheat has low falling numbers.

Don Potts, regional manager of the state grain inspection service, said so far his office has run 22,000 tests. During the harvest, they received 600 requests for tests per day, but had the capacity to do 200 tests a day when running at maximum capacity — 16 hours a day, seven days a week. Potts’ office is still receiving 10 to 20 test requests a day.

**• Will storing the grain improve my falling number?** The grain can improve, but must be kept at a higher temperature over a long time, which in turn increases the risk of insects getting in. Researchers urge farmers to keep their expectations realistic.

If a falling number is very low, storage doesn’t have an impact.

“We’ve been testing (a 144 falling number) sample for three years, every other month, and it doesn’t change,” said Arron Carter, Washington State University winter wheat breeder.

**• Do fungicides have an effect on falling number?** Carter said no.

**• Can the wheat be blended?** Falling number doesn’t blend linearly like proteins or test weights. For example, a 10 percent protein wheat mixed with one that’s 11 percent protein results in a 10.5 percent blend. Falling numbers is a logarithmic blend. Blending wheat with a 350 falling number and wheat with a 250 falling number results in a 290 falling number. A 400 falling number and a 200 falling number blend results in a 260 falling number. A 450 falling number and a 150 falling number gets a 210 falling number blend.

“You go higher and lower, the overall blend actually works lower,” Jessup said.

**• Is this unique to the PNW?** It’s a global problem, said Washington Grain Commission chairman Mike Miller. Australia began dealing with it nearly two decades ago.

## Diversification reduces falling number risk, expert says

By **MATTHEW WEAVER**  
Capital Press

SPOKANE — The best step wheat farmers can take to reduce the possibility of falling number problems this year is to plant a different variety in each field.

Washington State University winter wheat breeder Arron Carter warned farmers to avoid blending varieties in the same field. A variety with a low falling number test reading can drag down one with a higher falling number.

Carter also urged farmers to weigh performance data for different varieties in different locations in past years.

For example, the WestBred variety Arrowhead had a low falling number at St. Andrews, Wash., field trials, but a high falling number in trials at Ritzville, Wash.

Farmers receive lower prices at grain elevators for falling number test results lower than 300. The test measures starch



Matthew Weaver/Capital Press

Washington Grain Commission chairman Mike Miller provides an update on efforts to address falling number problems in wheat during a panel discussion Feb. 9 at the Spokane Ag Expo and Pacific Northwest Farm Forum.

damage that affects the quality of baked goods and noodles. The problem can occur when rain falls on mature grain or when temperatures fluctuate after the grain flowers.

Last year, about 44 percent of the soft white wheat crop and 42 percent of club wheat, a subclass of soft white wheat, was estimated to be below the

300 falling number industry standard, said Don Potts, Eastern Washington regional manager for the state Department of Agriculture grain inspection program.

About 12 percent of hard red winter wheat and 8 percent of hard red spring wheat were also affected.

It’s still too soon to determine

### Online

Check falling number data for wheat varieties at <http://steblerlab.org/project7599.php>

the economic impact for growers, said Mike Miller, chairman of the Washington Grain Commission and vice chairman of U.S. Wheat Associates. The problem hasn’t reached overseas buyers, he said.

Buyers aren’t likely to purchase wheat with a falling number below 300, said Ty Jessup, industry representative on the grain commission and marketing manager of Central Washington Grain Growers in Waterville. They would look to a competing country that can supply the specifications they’re seeking.

Short-term solutions include eliminating ambiguous language in the USDA Federal Grain Inspection Service’s instructions, Potts said.

“The directive will say to put in the water first, followed

by the flour, and then the very next sentence says, ‘Or you can put the flour in first, followed by the water,’” he said.

The FGIS uses the state as its gold standard for running falling number tests, Potts said.

The long-term goal is to develop a whole-grain analyzer to test wheat at grain elevators, to better separate out wheat with low falling numbers.

Estimates of when that test will be available range from 18 months to several years away, Miller and Potts said.

“Sooner would be better, for sure,” Potts said.

Miller said the commission, with the Idaho and Oregon wheat organizations, recently met with USDA and the Agricultural Research Service in Washington, D.C., to seek federal funding for research.

Northwest researchers will meet in Spokane on Feb. 16 to coordinate efforts. The panel discussion took place Feb. 9 at the Spokane Ag Expo and Pacific Northwest Farm Forum.

## Inslee: Suppression and carbon fuel catastrophic wildfires

### Millions of dollars needed to catch up

By **DON JENKINS**  
Capital Press

OLYMPIA — Washington Gov. Jay Inslee said Thursday that fire suppression and climate change have made forests unhealthy, as lawmakers consider directing the Department of Natural Resources to draw up a long-range plan to thin forests through logging and controlled burns.

The state’s 2016 wildfire season was modest compared to 2015, but 459 square miles still burned. In the previous year, a record 1,777 square miles burned, according to the Northwest Interagency Coordination Center, a federal and state partnership.

Fielding questions at a



Don Jenkins/Capital Press

Washington Gov. Jay Inslee gestures during a news conference Feb. 9 in Olympia. Inslee said fire suppression and climate change have made forests too dense, leading to raging wildfires.

press conference, Inslee cited wildfires as evidence that, “My state is getting hurt by climate change right now.”

He acknowledged that suppressing fires also has contributed to raging wildfires.

“The overly dense forests are largely attributable to our

suppression efforts,” Inslee said. “So, yes, we have to do some management in the forest, but we also have to attack it at the source, which is carbon pollution.”

The governor’s proposed two-year budget includes \$30 million to DNR and \$15 million to the Department of Fish and Wildlife for thinning forests.

The money, under the plan, would come from a new tax on carbon emissions.

Lawmakers have not embraced Inslee’s previous proposals to tax carbon to encourage reductions in greenhouse gases and pay for government programs, including education. It’s also unclear whether legislators will support spending more to thin forests.

According to DNR, the state has spent about \$400 million fighting fires since

2009 and about \$21 million thinning forests.

The U.S. Forest Service and Nature Conservancy estimated in 2014 that about 3 million acres need to be thinned, including 2.7 million in Eastern Washington.

While WDFW has conducted controlled burns on lands it manages, DNR gave up the practice in the 1990s because of complaints about air pollution and smoke spoiling spring days.

This year, DNR is asking lawmakers for \$14 million to thin 30,000 acres over the next two years.

“We’re continuing to see an overall deterioration in the health of our forests, and it’s evident by the number of wildfires,” DNR forest health policy adviser Loren Torgenson said.

House and Senate bills

call for DNR to conduct its own assessment and identify which parcels should be thinned first.

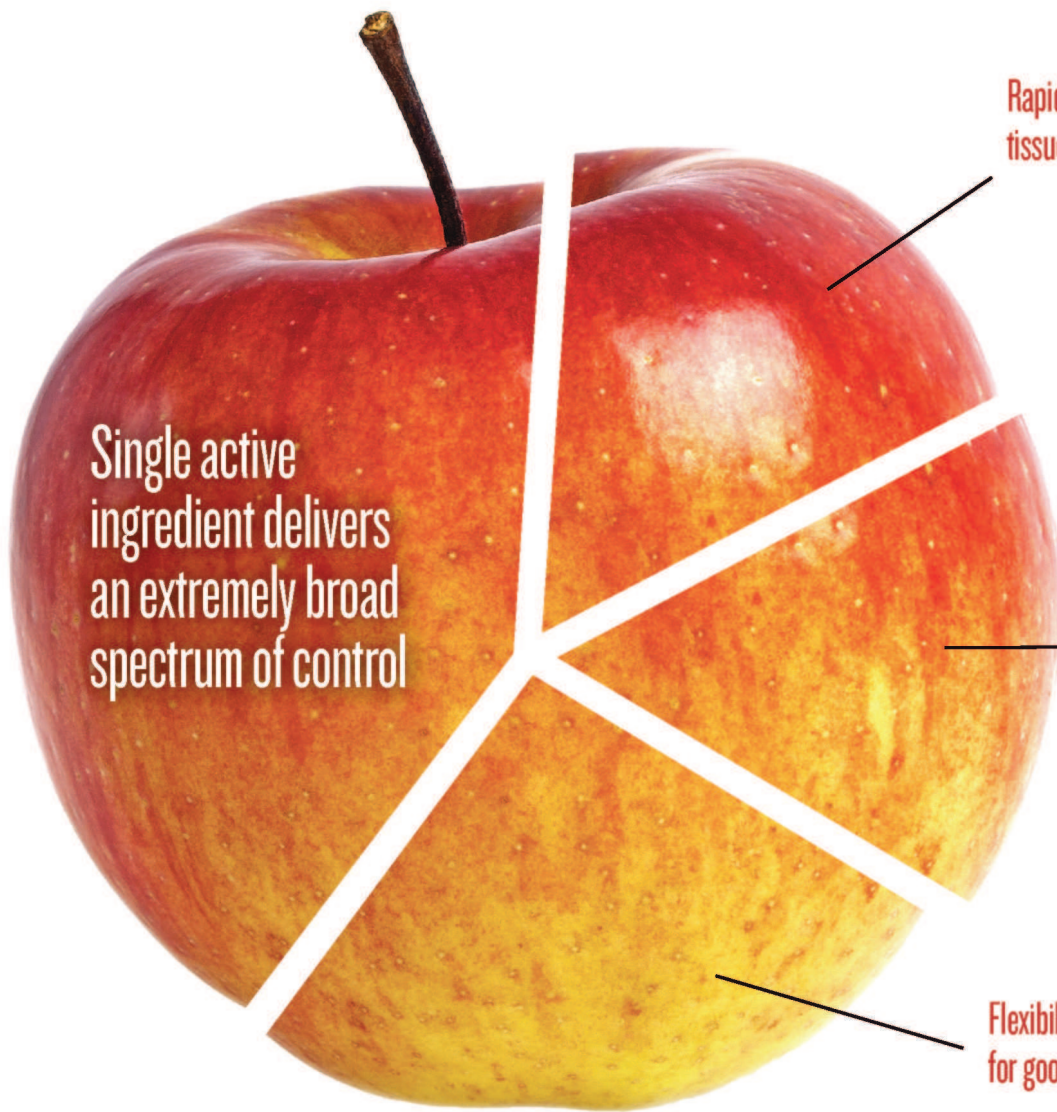
DNR should place a high priority on thinning projects that protect farms and ranches, according to one proposal.

DNR supports the bills, though the department’s legislative director Dave Warren estimated thinning 100,000 acres or more a year to catch up will cost take two-year appropriations of \$30 million to \$50 million.

“We want to get some realistic numbers, some realistic approaches,” he said.

Supporters of controlled burns say that Washington lags behind other states in thinning forests. They argue managed fires will reduce the number of large wildfires and reduce air pollution and carbon emissions.

## When explaining disease protection for apples, cherries and pears, a pie chart didn’t seem right.



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