When soybean was popularized in the U.S. in the 1800s, farmers eagerly embraced the legume from East Asia as a forage crop. Today, it is more commonly grown as an oilseed crop rotated with corn throughout the Farm Belt.

Western hay producers, though, hope the high-protein crop could work yet again as a cost-reducing annual forage that could replace or complement perennial hay crops like alfalfa and timothy.

Steve Norberg, a CPAg and Washington State University extension forage specialist in Pasco, WA, has finished his second year of researching how soybean hay can help save farmers on labor by reducing the number of cuttings to one per year, rather than having four or more cuttings per year with the traditional perennial crops.

“One of the biggest expenses that producers have is the four cuttings they have in alfalfa hay,” Norberg explains. “They’ve got to have help all year long, and they have to move their equipment four times a year to all their different locations. What if you could condense that to a shorter period of time with a one-cut system? This benefit would increase with fields far away from each other. This was my train of thought when trying to figure out how to make having more profitable for our producers.”

Fertilizer savings would also be a benefit to the farmer, he notes. “Since it’s a legume, we don’t have to worry about the nitrogen cost, which in the last few years has been significant.”

Hay farmer Craig George put Norberg’s idea of growing soybean hay to work on his farm near Ellensburg, WA, by testing it on 10 acres. Despite never having grown soybeans on his farm, which is comprised mostly of timothy and oat hay, George saw soybean hay’s potential as a high-protein feed for his cow-calf operation consisting of 60 mother cows.

The $140/ac price tag for seed, though, caused sticker shock. But when he figured the cost savings of not having to apply fertilizer, George calculated that the crop could potentially find a place in his crop rotation.

Other hay farmers might reject the idea of growing soybean in the West, Norberg admits. But the crop already has a proven track record on yield when harvested for oilseed, he says. It’s also easy to grow and is supported by ample scientific research.

“Normally the West isn’t a typical soybean production area, but we can grow soybeans in the West,” he says. “We’ve had irrigated oilseed soybean yields in Idaho, Oregon, and Washington as high as 80 bushels to the acre in recent years, similar to Midwest irrigated areas.”

While soybean hay could reduce farmers’ labor and fertilizer costs, Norberg is hopeful that as an annual crop, it would allow them to increase marketing opportunities that perennial crops might miss out on. Other annual crops could follow soybean in the rotation, he points out, including wheat, corn, potatoes, onions, sugar beets, field beans like great northern and garbanzo beans, and other high-value crops commonly grown in the Columbia Basin in Washington.

The increased crop diversity, he adds, could also improve control over weeds, diseases, and insects.

That’s especially attractive for growers like George who, after years of growing timothy and oats, is looking for a way to control grassy weeds. A Roundup Ready variety of soybean would allow him to use glyphosate as another tool for controlling the bluegrass, ryegrass, crabgrass, and cheatgrass that have emerged in his hay fields.

That’s no small problem among other hay growers in his local area east of the Cascade Mountains where