# Production of Northwest Washington Heirloom Dry Beans (*Phaseolus vulgaris*)©

Kelly Ann Atterberry, Carol A. Miles and Brook Brouwer
Washington State University, Mount Vernon NWREC, 16650 St. Rt. 536 Mount Vernon, Washington 98273, USA
Email: kelly.atterberry@wsu.edu

Dry bean (*Phaseolus vulgaris*) is a pulse crop that is relatively easy to grow throughout Washington and benefits vegetable crop rotation by breaking disease cycles and providing nitrogen for the following crop. Consumer demand for regionally produced staple crops has opened a market opportunity for dry bean production and niche market cultivars (colored, patterned beans) are sold at local farmers markets for $6-$14 per pound. Small-scale growers have been successfully growing dry beans in northwest Washington for over 100 years; however, it is not clear if these cultivars are suitable for production on a larger scale. The objective for this study was to compare heirloom dry bean cultivars that have been grown in northwest Washington for 20-130 years with standard cultivars (seed grown outside the region) to determine which are more productive in the region. This study was initiated in 2013 and will be repeated in 2014. In May, 14 northwest heirloom dry bean cultivars and 11 standard cultivars were seeded in a replicated field trial at Washington State University Mount Vernon Research Center. Plots were 10-ft long, four rows wide with four replications in a randomized complete block design. Plots were not irrigated, following common practices in the area. Plots were hand harvested 1 Sept. through 1 Oct. In 2013, yield and days to maturity differed significantly among cultivars ($P<.0001$ and $P=0.003$, respectively). Average yield for northwestern heirloom cultivars was 2330 lbs/acre and average days to maturity was 109 days after seeding. In comparison, average yield for standard cultivars was 2298 lbs/acre and the average days to maturity was 114 days. Highest yielding cultivars were 'Eclipse' (standard black, 3094 lbs/acre), 'Lariat' (standard pinto, 3008 lbs/acre), and 'Ireland Creek Annie' (Standard) (standard yellow, 2747 lbs/acre). Northwest heirloom cultivars that were next highest yielding were 'Youngquist' (brown, 2612 lbs/acre), 'Bale' (cranberry, 2617 lbs/acre), and 'Ireland Creek Annie' (NW) (yellow, 2595 lbs/acre). Cultivars with the shortest days to maturity included five northwestern heirloom cultivars: 'Black Coco' (101 days), 'Decker' (101 days), 'Ireland Creek Annie' (NW, 101 days), 'Francis Kring' cranberry (104 days), and 'Rockwell' (107 days). One standard cultivar, 'Ireland Creek Annie' (Standard), also matured early (104 days), while all other entries matured from 101-124 days of seeding. [Editors note: there are two forms of 'Ireland Creek Annie': seeds produced in the northwestern Washington (NW) region and 'Ireland Creek Annie' seeds from seed companies.] Growers in northwestern Washington would benefit most from dry bean cultivars that are early to mature as the onset of rains by late September makes harvest difficult.