This project evaluated key varieties of lentils, peas, chickpeas, common beans, and faba beans at strategic locations of adaptation in Saskatchewan in 2016. Trials were coordinated by the pulse crop breeding group at the Crop Development Centre (CDC), University of Saskatchewan and were conducted by the CDC, as well as by co-operators in the province. Useful yield data were collected from most sites and the data were reported for 2016 and incorporated into long-term means then presented to the Saskatchewan Advisory Council on Grain Crops for approval, prior to publication in the Saskatchewan Ministry of Agriculture publication Varieties of Grain Crops, 2017, which is widely available.