



APPLICATIONS UNDER EXAMINATION

SOYBEAN

SOYBEAN (*Glycine max*)

Proposed denomination: 'P0007A65R'
Application number: 18-9467
Application date: 2018/05/07
Applicant: Pioneer Hi-Bred International, Inc., Johnston, Iowa, United States of America
Agent in Canada: Pioneer Hi-Bred Production Co., Calgary, Alberta
Breeder: Nadia Krasheninnik, Pioneer Hi-Bred International, Inc., Moorhead, Minnesota, United States of America

Variety used for comparison: 'P0007A43R'

Summary: *When 95% of pods are ripe, the pubescence on the middle third of the main stem of 'P0007A65R' is light tawny whereas the pubescence is tawny for 'P0007A43R'. The plants of 'P0007A65R' are taller than the plants of 'P0007A43R'.*

Description:

PLANT: indeterminate growth type, light tawny pubescence on middle third of main stem, begins flowering and matures very early in the season

HYPOCOTYL: anthocyanin colouration present

LEAF: pointed ovate lateral leaflet

FLOWER: violet

POD: medium brown

SEED: yellow ground colour of testa

HILUM: medium brown

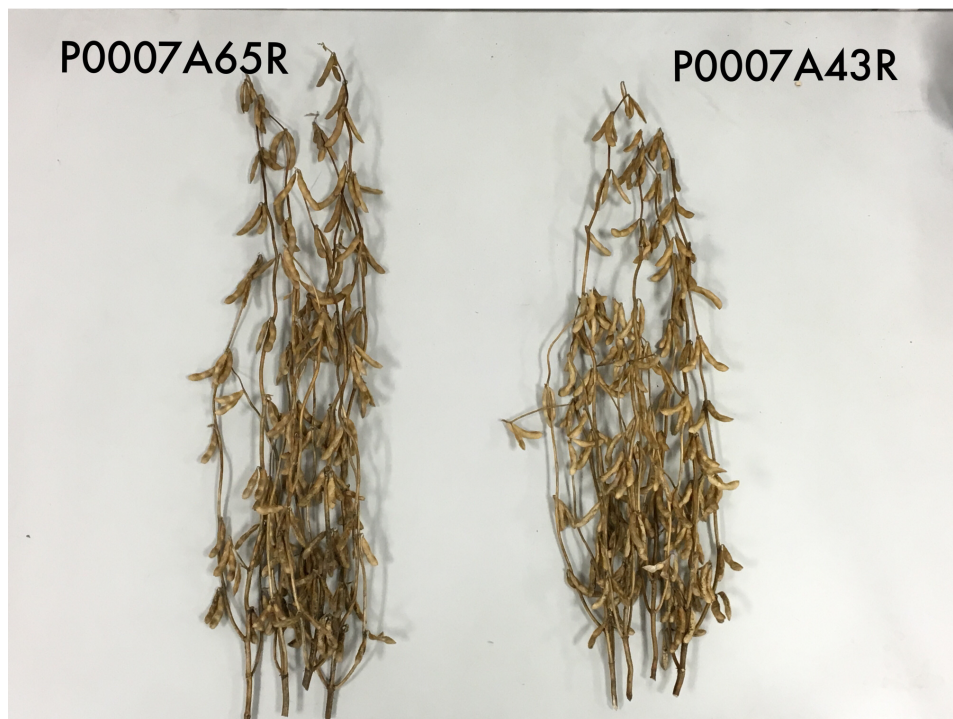
Origin and Breeding: 'P0007A65R' (experimental designation 5PHFW50) is the result of a three-way cross between a licensed soybean line and two proprietary selections, conducted in 2010 in Salinas, Puerto Rico. The modified single seed descent and pedigree methods of plant breeding were used to develop the variety. The F1 generation, grown in Salinas, Puerto Rico, was harvested in bulk and the F2 and F3 generations were grown in Salinas, Puerto Rico in 2011 and 2012. In 2013, single F4 plant selections were made in Moorhead, Minnesota, USA with one being designated as 5PHFW50. Selections were followed by single plant purification, with individual plant rows harvested and advanced, in 2014 in Viluco, Chile. In 2014, regional yield tests were conducted in Moorhead, Minnesota. Wide area regional testing continued from 2015 to 2017 at various locations in the USA and Canada. Selection criteria included yield, maturity, resistance to glyphosate herbicides, oil content, protein content and late season plant health.

Tests and Trials: The comparative trial for 'P0007A65R' conducted in Souris, Manitoba during the 2018 growing season, was planted in a RCB Design and consisted of 3 replicates for each variety. Plots consisted of 2 rows, each 4.5 metres in length with a row spacing of 76 cm. For each variety, the plant height was based on 30 measurements. Mean differences were significant at the 5% probability level based on a paired Student's t-test. Results were supported by the official technical examination report 201800333, purchased from the Plant Variety Protection Office in Washington, District of Columbia, USA.

Comparison table for 'P0007A65R'

	'P0007A65R'	'P0007A43R'*
<i>Plant height (cm)</i>		
mean	77.0	70.8
std. deviation	2.9	4.0

*reference variety



Soybean: 'P0007A65R' (left) with reference varieties 'P0007A43R' (right)