

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
Washington, D. C.

and

AGRICULTURAL RESEARCH CENTER
Washington State University
Pullman, Washington

and

IDAHO AGRICULTURAL EXPERIMENT STATION
University of Idaho
Moscow, Idaho

and

OREGON AGRICULTURAL EXPERIMENT STATION
Oregon State University
Corvallis, Oregon

RELEASE OF A COMMERCIAL CULTIVAR
OF LARGE KABULI CHICKPEA, SANFORD

The Agricultural Research Service of the United States Department of Agriculture, the Washington Agricultural Research Center, the Idaho Agricultural Experiment Station and the Oregon Agricultural Experiment Station announced the release and naming of a new large kabuli type chickpea (garbanzo) cultivar designated as 'Sanford'. Sanford, CA188220, was developed by the U. S. Department of Agriculture, Grain Legume Genetics and Physiology Research Unit, Pullman, Washington, in cooperation with the Agricultural Research Center of Washington State University.

Sanford originated from a cross made in 1988 between FLIP 85-58 and Surutato-77 by USDA/ARS at Pullman, Washington. FLIP 85-58 had been identified as having a high degree of resistance to Ascochyta blight in germplasm evaluations in 1987 and 1988. The F₁ and F₂ were grown in the greenhouse during the 1988/89 winter season and F₃ families were then screened in the Ascochyta blight nursery at the Washington State University Spillman Farm in the spring of 1989. F₄ seeds from blight resistant single plants were planted in the greenhouse in the fall of 1989 and F₅ progeny rows were then screened in the Ascochyta blight nursery in the spring of 1990. F₆ seeds from blight resistant plants were planted in the greenhouse in the fall of 1990 and F₇ progeny rows were screened in the Ascochyta blight nursery in 1991. Twelve highly resistant selections were then made from the blight nursery and planted at Yuma, Arizona for increase in the fall of 1991. In 1992, CA188220 was entered into uniform yield trials which were planted at Pullman, Washington and at Genesee, Idaho

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and further increased at Spillman Farm. Based on its high degree of resistance to Ascochyta blight and excellent seed quality traits, CA188220 was chosen for further increase at Yuma during the 1992-93 winter season.

Yields of CA188220 compared very favorably to UC-5, Surutato-77 and Tammany. In addition to comparable or better yields, seeds of CA188220 have excellent quality including good size (100 seeds weigh 54 grams) and color. CA188220 has uniform large deeply-wrinkled cream-colored seeds which are highly desired by canners of garbanzos. The selection is well adapted to reconstitution and has shorter cooking times when compared to Surutato-77, UC-5 or Tammany. Sanford differs from CA188359/380, the other proposed release to be designated as 'Dwellely', by being three days earlier to mature, having slightly smaller seeds but significantly higher yields. Sanford is likely to be better adapted to higher elevation areas with somewhat shorter growing seasons.

CA188220 has a unifoliate leaf structure which is similar to that of Surutato-77 and Tammany, and differs from the fern leaf structure of UC-5.

Breeder seed of Sanford will be maintained by the Washington State Crop Improvement Association. Foundation seed will be available from the Washington State Crop Improvement Association, Washington State University, Pullman, Washington 99164.

Release date for publicity purposes shall be effective on the date of final signature of the release notice.