

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, Dwelley

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 'Dwelley'. Dwelley, CA188359/380, 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.

Dwelley 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. CA188359/380 was further increased at Spillman Farm in 1992 and entered into a uniform yield trial which was planted at



Pullman, Washington and at Genesee, Idaho. Based on its high degree of resistance to Ascochyta blight and excellent seed quality traits, CA188359/380 was chosen for further increase at Yuma during the 1992-93 winter season.

Yields of CA188359/380 compared very favorably to UC-5, Surutato-77 and Tammany. In addition to comparable or better yields, seeds of CA188359/380 have excellent quality including good size (100 seeds weigh 60 grams) and color. CA188359/380 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. Dwelley differs from CA188220, the other proposed release to be designated as 'Sanford', by being three days later to mature, having larger seeds but having somewhat lower yields. Dwelley is likely to be better adapted to lower elevation areas with longer growing seasons.

CA188359/380 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 Dwelley 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.