The Agricultural Research Service of the United States Department of Agriculture, the Washington Agricultural Research Center, the Idaho Agricultural Experiment Station the North Dakota Agricultural Experiment Station and the California Agricultural Experiment Station announce the release and naming of a large-seeded cream-colored chickpea (Cicer arietinum L.), ‘Sierra.’ Sierra was developed by the U.S. Department of Agriculture, Grain Legume Genetics and Physiology Research Unit at Pullman, Washington, in cooperation with the College of Agriculture, Agricultural Research Center of Washington State University. Sierra, selection number CA9683152, originated as an F₈ selection from progenies from the cross Dwelley/FLIP85-58/Spanish White made by F.J. Muehlbauer in 1992.

Sierra was yield tested in eastern Washington, northern Idaho, North Dakota and South Dakota for a total of ten site-years over three years of testing. It outyielded ‘Dwelley’ and ‘Sanford’ in eight of the ten yield tests (Table 1). Sierra outyielded ‘Dwelley’, the current industry standard, by an average of 10% over the three years (1258 vs. 1146 pounds/acre) in the most likely regions.
for production of this cultivar. Sierra also performed better than Dwelley and Sanford at locations in North Dakota and South Dakota. Sierra has good resistance to ascochyta blight caused by Ascochyta rabiei (Pass.) Labr. a common chickpea disease in most production areas.

Plants of Sierra averaged 21 inches tall and had an upright habit with simple (unifoliate) type leaves. Flowering begins at about 14 inches above the soil surface and commences about 46 days after planting depending on climatic conditions. Crop maturity is 2-3 days earlier than Dwelley or Sanford and generally about 110 days after planting. Seeds of Sierra average 61.4 grams per 100 seeds which is equivalent to 740 seeds per pound. Seed size is similar to Dwelley but larger than Sanford. Seeds of Sierra are light-cream colored and lighter than Dwelley and Sanford.

Breeder seed of Sierra 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.

Genetic material of this release will be deposited in the National Plant Germplasm System where it will be available for research purposes, including development and commercialization of new varieties/cultivars. Plant variety protection will be pursued for this variety.

It is requested that appropriate recognition be made if this germplasm contributes to the development of a new breeding line or cultivar.

Ralph A. Canzian
Director, Agricultural Research Center
Washington State University

March 15, 2002
Date

Camilla Raybould
Administrator
Agricultural Research Service

March 14, 2003
Date

Director, North Dakota Agricultural Experiment Station
North Dakota State University

7/24/02
Date

K. E. DeSutter
Director, California Agricultural Experiment Station
University of California

4-1-02
Date

Richard F. Senn
Director, Idaho Agricultural Experiment Station
University of Idaho

6/1/2002
Date