## **Blueberry Florida 4B - Southern Production**

USDA-ARS Agricultural Research Service & University of Florida, USA

Florida 4B (Vaccinium darrowii; PI 554904), a Southern-adapted wild blueberry with exceptional quality, was instrumental in expanding consumer access to blueberries. Florida 4B was collected in the 1950s from a Florida pasture, and is now conserved by the USDA National Plant Germplasm System. It was used in crosses with Northern commercial blueberries to develop Southern highbush blueberries. Cultivars from this type have reduced chilling requirements that allowed the industry to expand to subtropical and tropical climates, thus revolutionizing global blueberry production.



SDA

Southern highbush blueberry in the evergreen system

## **PROJECT GOALS**

Reduce chilling requirements of Northern highbush blueberries
to expand blueberry-producing areas

## **Problems Addressed**

Blueberries were first domesticated and cultivated in New Jersey, U.S. in the early 1900s where winters were very cold, summers were moderate, and chilling hours were high (about 1,000 hours). Interest in blueberry fruit production grew in the U.S., which has the highest per capita consumption. To expand blueberry production, cultivars with a lower chilling requirement were needed for production in the Southern states.

## **Solutions Developed**

Blueberry germplasm was collected from its native range in warmer climates. Florida 4B and a few others were used in inter-specific crosses with elite cultivars to start a breeding program for production in the South. This resulted in the Southern highbush blueberry varietal type, with cultivars that require low or no chilling. These may be grown with the new "evergreen" technique, which has plants maintain their leaves through the winter for accelerated berry production. Southern-adapted cultivars and complementary horticultural techniques have provided consumers with access to blueberries year-round.



Written by: N. Bassil, J. Oliphant, P. Munoz, K. Chen (editor) To learn more about this and other success stories, visit <u>colostate.pressbooks.pub/pgrsuccessstories</u>