SOUTH DAKOTA AGRICULTURAL EXPERIMENT STATION
SOUTH DAKOTA STATE UNIVERSITY
BROOKINGS, SD

AND

MICHIGAN AGRICULTURAL EXPERIMENT STATION
MICHIGAN STATE UNIVERSITY
EAST LANSING, MI

AND

USDA-NRCS BISMARCK PLANT MATERIALS CENTER
BISMARCK, ND

AND

USDA-NRCS ROSE LAKE PLANT MATERIALS CENTER
EAST LANSING, MI

RELEASE OF SHOLTY ALFALFA

The South Dakota Agricultural Experiment Station, South Dakota State University, Brookings, SD, the Michigan Agricultural Experiment Station, Michigan State University, East Lansing, MI, the USDA-NRCS Bismarck Plant Materials Center, Bismarck, ND, and the USDA-NRCS Rose Lake Plant Materials Center, East Lansing, MI announce the release of SD201yellow-flowered alfalfa [*Medicago sativa* subsp. *falcata* (L.) Arcang. (syn. *M. falcata* L.)] under the name of Sholty. Sholty alfalfa is adapted to Plant Hardiness Zones 2, 3, and 4. It produces high amounts of forage in semiarid regions from a delayed single harvest per growing season management system in the northern Great Plains (ND and SD) and a 2-harvest system in the sub-humid Great Lakes Region (MI). It is more persistent than conventional hay type or pasture type alfalfas under dryland grazing. It has a high tolerance to potato leafhopper yellowing that enables it to be stockpiled in the field during early summer without stunting and leaf drop. In replicated seeded dryland trials at Brookings, SD, Sholty (5.7 Mg ha^{-1}) significantly out yielded 'Don' (3.7 Mg ha -1) and 'Yellowhead' (4.4 Mg ha^{-1}) yellow-flowered alfalfas in a delayed 1-harvest system (harvest was mid-July) two years after planting and produced twice as much forage as Don and 65% more forage than Yellowhead five years after planting due to its superior persistence. Additional evaluations of persistence and vigor in semiarid dry-land plantings by personnel at the Bismarck PMC indicated Sholty was superior for stockpiling forage for a delayed 1-harvest system compared with other drought and cold tolerant hay and pasture cultivars. Its ability to accumulate large amounts of forage after first flower and retain leaves from first flower until July 20, plus its "bowl-shaped" growth habit, make it highly suitable for nesting cover for pheasants and other game-birds.

Sholty was developed from 1 cycle of selection for vigor, tolerance to potato leafhopper yellowing, leaf retention, and semi-erect growth habit. It is a 41-genotype synthetic cultivar with genotypes from 13 different source germplasms, including 7 PIs, 4 experimentals from rangeland populations in South Dakota, and 2 cultivars (Anik and Kuban). For more details, see Boe, A., R. Bortnem, K.F.Higgins, A.D. Kruse, K.D. Kephart, and S. Selman. 1998. Breeding yellow-flowered alfalfa for combined wildlife habitat and forage purposes. SDAES 727. Brookings: South Dakota State University. 12 pp.

Foundation seed of Sholty was produced at the USDA-NRCS Rose Lake Plant Materials Center. Foundation seed will be managed by the South Dakota Foundation Seed Stocks Division, Brookings, SD. Breeder Seed will be maintained by South Dakota State University. Foundation seed will be made available on an exclusive basis to seed producers who contractually agree to produce and market the seed using the name Sholty. A royalty fee will be assessed.

Individuals contributing to the development of the cultivar Sholty were Arvid Boe, Robin Bortnem, Susan Selman, Kevin D. Kephart, K.F. Higgins, and A.D. Kruse.

____________________ Date: August 8, 2015 .
Director, South Dakota State University Agricultural Experiment Station
Brookings, SD

____________________ Date: August 8, 2015 .
Director, Michigan Agricultural Experiment Station
East Lansing, MI

____________________ Date: 12-1-2015.
for Director, Ecological Sciences Division
United States Department of Agriculture
Natural Resources Conservation Service
Washington, D.C.

____________________ Date: 8·19·15.
State Conservationist
United States Department of Agriculture
Natural Resources Conservation Service
East Lansing, MI

William O'Donnell acting Date: 19 Oct 2015.
State Conservationist
United States Department of Agriculture
Natural Resources Conservation Service
Bismarck, ND