E... ...ent. Plant Center
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NOTICE OF THE NAMING AND RELEASE OF 'SUMMIT' LOUISIANA SAGE (ARTEMISIA LUDOVICIANA) FOR DISTURBED LAND RECLAMATION

BY THE

UPPER COLORADO ENVIRONMENTAL PLANT CENTER
AND THE
UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
AND THE
COLORADO STATE UNIVERSITY AGRICULTURAL EXPERIMENT STATION
AND THE
UTAH STATE UNIVERSITY AGRICULTURAL EXPERIMENT STATION
AND THE
UNIVERSITY OF IDAHO AGRICULTURAL EXPERIMENT STATION
AND THE
UNITED STATES DEPARTMENT OF AGRICULTURE - FOREST SERVICE INTERMOUNTAIN RESEARCH STATION

The Upper Colorado Environmental Plant Center, United States Department of Agriculture - Soil Conservation Service, Colorado State University Agricultural Experiment Station, Utah State University Agricultural Experiment Station, University of Idaho Agricultural Experiment Station, and the United States Department of Agriculture - Forest Service Intermountain Research Station announce the naming and release of 'Summit' Louisiana sage [Artemisia ludoviciana, Nutt.] for commercial production and marketing of seed and plants. The strain was selected for its ability to establish on harsh sites, control erosion, and encourage establishment of higher plant forms.

Origin: Identified as EPC 328, 08-00328, T21474, this seed was collected by Jarrell Massey and Glenn F. Carnahan, October 4, 1975, on Georgetown Summit, Bear Lake County, Idaho, elevation 1,909 meters (6,300 ft.) in Major Land Resource Area called Northern Rocky Mountains. It was growing on a gravelly loam soil developed from a deep loess containing limestone or quartz gravel. The soil is deeply leached with its pH ranging from 5.6 to 7.3. The site receives 35 to 40 centimeters of precipitation, two-thirds in the form of snow. The site has a seventy-seven day frost-free period. Minimum winter temperatures sink to minus 38 degrees F (-38 degrees C) and summer warmth reaches 90 degrees F (32 degrees C). January averages 17.6 degrees F (minus 8 degrees C), and the average mean annual temperature is 41.8 degrees F (5.4 degrees C).

Description: 'Summit' Louisiana sage is a herbaceous perennial having a spreading rootstock. Its leaves are not basal but like the stems are wooly pubescent. Leaves are extremely variable from plant to plant, ranging from lanceolate and entire to variously lobed and deeply cleft. 'Summits' upper and lower leaves are often reduced, linear, lanceolate and entire. The middle leaves are elliptic, toothed or lobed mostly 6 to 10 cm long. The stems are 60 to 90 cm tall. Heads are in narrow spike-like or raceme-like panicles. Flowers are numerous and small (3 mm) and the corollas are light brown. Flowers can be self or open pollinated. Fruits are an achene and are present

the size of a small pea to the size of a quarter on the roots. He observed definite acetylene reduction and has isolated a bacterial organism characteristic of the Rhizobium. He also notes there is much to learn about the system since they have had no success reinfecting and getting nodulation of plants in the greenhouse.

Area of Adaptation: The full range of adaptation of 'Summit' is unknown. It can be concluded that it will perform on poor soil condition sites where moisture is generally above 12 inches and the elevation is about 6,000 ft. Since it originated in southeast Idaho and has been tested throughout the western half of Colorado, assumptions can be made that it will perform in the mountainous areas of Idaho, Wyoming, Colorado, and Utah. Establishment from seed is sometimes difficult since seed must be planted quite shallow and sufficient moisture must be available. Once established, the plant requires little maintenance and expends much energy developing a shallow root system by which it spreads. There are no cultivars of Louisiana sage available in the seed market; consequently, no commercial standard for comparison is available.

Seed and Plant Source: Breeder and foundation seed, and foundation sprigs, will be maintained and produced at the Upper Colorado Environmental Plant Center, Meeker, Colorado. Recognized classes of seed and plants will be breeders, foundation, registered, and certified. Foundation seed and sprigs will be available in 1985 to growers through the Crop Improvement Associations in Utah and Colorado. Standards for all classes of plants and seed will be included in the Utah and Colorado Seed Certification Standards.