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Miscellaneous

Lotus pedunculatus

Dr. D. F. Dolan has noted in the Northeastern Regional Plant Introduction Station Report (DRL-164) that 28.35 grams (1 ounce) of seed of Lotus pedunculatus contains 55,210 seeds. With approximately 18,000 plants per 4046.72 sq. meters (1 acre), this would be sufficient seed to plant three times this area. Other information on seed size and weight in Lotus is given in Grant (1967).

Grant, W. F. 1967. Cytogenetic factors associated with the evolution of weeds. Taxon 16: 283-293.

A NEW CULTIVAR "MARSHFIELD"

In the New York Agricultural Experiment Station report (DR L-161), February 8, 1971, the lengthy history of a new cultivar is described as follows:

In 1919, an introduction of big trefoil (Lotus pedunculatus, P.I. 48636) was introduced from New Zealand. In New Zealand, it was called 'Greater Birdsfoot Trefoil' and at the time of collection was described as follows: "A pasture plant of agricultural importance used in New Zealand, from 10-15 tons of seed being sown annually. This species prefers a wet of swampy habitat. It is saved for seed mainly in Auckland Province. Prior to World War I, the greater portion of seed was imported from Germany. This species is variable with regard to certain characters, such as hairiness and in consequence several botanical names have been given to it. There are apparently a variety of strains. (This was extracted from New Zealand Journal of Agriculture, Vol. 17, p. 347).

Sometime in the interval since 1919, P.I. 4836 has been tested at the USDA-SCS Plant Materials Center, Pullman, Wash., under #P15553 and carried as Lotus pedunculatus. During the testing, it has found to be very winter-hardy at Pullman and is now being released as a new cultivar with the name 'Marshfield'. Thus, there was a lapse of 51 years from introduction of the accession to release of the new cultivar.

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From the Annual Report (December 1, 1971) of the Northeastern Regional Plant Introduction Station, Geneva, New York.

MYROTHECIUM LEAFSPOT

A preliminary screening of *Lotus corniculatus* accessions is currently being undertaken to determine whether any of these lines shows adequate greenhouse resistance to a rather non descript leafspot of birdsfoot trefoil incited by *Myrothecium verrucaria*. Preliminary greenhouse inoculations indicated that this species is pathogenic on trefoil and the varieties of *L. corniculatus* show differences in susceptibility to the pathogen. It is anticipated that the entire *L. corniculatus* collection will be screened eventually as well as *L. tenuis* and *L. pedunculatus*.

Diploid *Lotus corniculatus*

In 1963, Dr. Wernsman in his thesis reported a so-called diploid *L. corniculatus* ($2n = 12$) which he stated did not resemble *L. corniculatus* and was probably mistakenly identified. The source of his seed (G7359, P. I. No. 273443) was from the Regional Plant Introduction Station, Geneva, New York. In correspondence with Dr. Dolan, this accession has turned out to be the same as our No. B-161, namely, *L. japonicus* (Regal) Larsen. I received seed from Dr. Gershoy who stated that it was collected by Prof. E. Meader, Department of Horticulture, New Hampshire University. In his letter of 12 June 1961, Dr. Gershoy states: "The site was below Seoul, near Hamman, Kyarggi Do, Korea. Apparently there was a field of this, but whether native or an escape I do not know. Dr. Meader has been ill and I do not want to trouble him. These plants differ slightly from those of Gifu City, Japan, sent to me by Dr. Bubar. The Japanese plants are more wiry-stemmed and have a deeper purplish pigment in the stems. Otherwise the plants resemble each other closely in growth habit, leaf, flower, pod, seed and meiotic characters."