TRANSFER OF USEFUL GENES FROM PISUM SATIVUM TO PISUM ARVENSE AND VICEVERSA

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field and common pea, breeding, domestication

Farmers and breeders have accumulated in centuries of cultivation several useful genes in Pisum sativum, utilized both as a horticultural and feeding crop. Roveja (Pisum sativum ssp arvense) is practically the wild species, with small, round and dark seeds, of special flavour, domesticated only for the indehiscent pods.

The purpose of the present work consists in the introduction into the Roveja of other characters of domestication, through a program of crossing with modern cvs of peas, in order to get ideotypes that maintain the flavour characteristic of the seeds of the Roveja, but with more advanced morfo-physiological and yield characters, typical of the cultivated pea and at the same time, to get new lines of pea with better characters of rusticity etc. Crosses were made between 6 selections of Roveja, with indeterminate habit, red flowers and round, small seeds and 3 cvs of P. sativum, characterized by aphila habit, smaller plant size, green, rough seeds. The recombination results are presented, with the isolation of aphila and superaphila types, facilitating the cultivation and harvesting of Roveja and increasing the availability of some useful characters in sativum, including the description of some characters previously not present or uncommon both in sativum and arvense types.