The article presents the results of studying of pollen-ovules ratios (P/O), the quality and size of the pollen in wild cereals with different mode of reproduction (sexual: Alopecurus pratensis L., Elymus caninus L., Glyceria fluitans (L.) R. Br., Poa annua L., Zerna riparia (Rehm.) Nevski; facultative apomict: Dactilis glomerata L., Koeleria cristata (L.) Pers., Festuca valesiaca Schleich. ex Gaudin, Festuca pratensis Huds., Hierochloë odorata (L.) Beauv, Poa pratensis L.). It is found that the size of pollen grains in the studied cereals is $25-35 \ \mu m$. Apomictic species are characterized by low quality of pollen. About 30% of the pollen grains in the anthers are sterile. The pollen-ovules ratios in the sexual and apomictic grasses are in the range from 1700 to 12000, which are typical for allogamous species. The obtained data indicate that the transition of plants on the facultative pseudogamy apomixis is not accompanied by a change of mode of pollination. Apomictic forms having low quality pollen achieve reproductive success through excessive production of pollen.