

THE ESSENTIAL CONDITION OF THE SEMINAL PRODUCTIVITY OF PATERAL FORMS OF CORN IS OPTIMAL TERMS OF SOWING

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Actuality. The results of production indicate that an improvement of high quality agrotechnics growing of corn is actual direction in modern conditions. Therefore, the improvement technology of growing of corn actually heads for satisfaction of necessities of plants and instrumental in discovering of potential possibilities of hybrids. The one of main conditions growing of high harvests of corn is sowing of corn in an optimum term. As a result of investigations, part of influence of term of sowing on the size of the productivity is 18-20 %, and in separate years, when $HTC < 0,8$, influence of this element of technology grows to 25-27 %. A term of sowing is agrotechniques measure which needs additional production expenses. The temperature of soil on the depth of arrange seed is criterion of beginning of sowing of corn. Consequently, practical decision of question of term sowing of corn and especially those paternal forms on the plots of hybridization it is necessary to co-ordinate with conditions which are directly folded in a spring period.

The aim of investigation was: establishment optimal terms of sowing and thickness of standing plants paternal forms of corn different groups ripeness in the conditions Kyiv region of Ukraine.

The asubject of investigation became: early-maturing hybrid Rist CR, middle-early maturing, is the Richka C, middle-maturing is Rushnik CR and inbreed lines: early-maturing is UR 9 fC, middle-early maturing is UR 331 CR and middle- maturing is UR 12 fC.

The variants from the investigations of efficiency terms of sowing paternal forms corn (seed were sown on April, 25, on May, 10 and on May, 25) were

included the field experiments . The repeated of researches is three-valid for one occasion

The placing of plots is systematic, by the method of breaking up. All basic technological measures conducted by concordantly to zonal recommendations, except for the probed factors.

Materials and method of investigations. Researches from optimization terms of sowing of paternal forms were conducted in 2014-2015 years in the plant-breeding crop rotation of LTD «Rasava», on the fields of LTD «Kolos» in Skvira district, Kyiv region of Ukraine. As a result of investigation marked, that the terms of sowing substantially influenced on forming of the individual productivity of paternal components (hybrids) of corn. The greatest values of index all paternal forms had a «output of grain» in a variant at sowing on April, 25 is set. More late sowing formed the lower exit of grain and greater for lack of seeds height from corncob . The analysis of the got results testifies to witnesset of correlation not only between humidity of grain and terms of sowing but also by the morfological signs of hybrids of corn. The displacement of terms of sowing in a more late period humidity of grain of corn rose appropriately are marked. The lowest percent of humidity grain looked at sowing on April, 25, and most moisture it was at sowing – on May, 25. At a early-maturing hybrid Rist CR is fixed the lowest humidity of grain – from 11,8% in I-st term of sowing to 19,6 % in the III -term of sowing in 2015 year and from 19,3 % to 24,3% in 2014 years. The information account of harvest of grain of corn showed, that on his forming the terms of sowing, morphological signs of hybrids, and also meteorological, influenced during the period of vegetation. On the average for years investigations (2014-2015 years) early-maturing hybrid Rist CR, middle-early maturing Richka C, middle-maturing Rushnik CR the greatest productivity was formed at sowing on April, 25 – 11,50, 11,12 and 11,27 t/hectare accordingly.

The inbreed material: at a inbreed early-maturing line UR 9 fC is fixed the lowest humidity of grain from 11,5 % in I-st term of sowing, to 21,7 % in the III-term of sowing in 2015 year and from 15,4 % to 19,4 % in 2014 years. It should be

noted that in the years of investigations in the most probed paternal forms the first term had humidity of grain at the level of standard (14 %), or approached it, it was that is why succeeded to avoid additional charges on after collected revision and drying of seed. The inbreed lines, in particular early-maturing line UR 9 fC and middle- maturing is UR 12 fC the greatest productivity was formed at sowing on April, 25 – 5,34 and 7,19 t/hectare, and middle-early maturing is UR 331 CR at sowing on May, 10 are 5,64 t/hectare. All probed paternal forms of corn at the late term of sowing (on May, 25) substantially reduced the productivity of grain.

As a result of investigation The most optimal term of sowing for hybrids which formed the high productivity, and in particular: Rist CR (11,50 t/hectare), Rushnik CR(11,12 t/hectare), Richka C (11,27 t/hectare) and inbreed lines, UR 9 fC (5,34 t/hectare) and UR 12 fC (7,19 t/hectare) is on April, 25; and for inbreed line UR 331 CR (5,64 t/hectare) – on May, 10.

Conclusions. The optimal terms of sowing, which enable good pollen-forming ability, high viability of pollen, and as result of the good quantity seeds on from corncob and forming of the high productivity is the first term of sowing, that on April, 25 are ascertain by investigations.

Key words: corn, term of sowing, paternal forms, inbreed lines, hybrids, hybridization.