Preliminary Selection of Sr Sweetcorn Hybrids in West Java Based on Its Stability and Adaptability for Agronomic Characters

D. Ruswandi[4,5],Tri Hastini[1], Anggia E.P[2], R. Y. Putra[2], Tino Mutiarawati[4], S. Ruswandi[3], and N. Rostini[4]

1) Research assistant, Center for applied agriculture technology, West Java
2) Research assistant, Maize Development Group, Lab. Of Plant Breeding, UNPAD
3) Adjunct Professor, Lab. Of Plant Breeding, UNPAD
4) Associate Professor, Lab. Of Plant Breeding, Universitas Padjadjaran (UNPAD) Bandung.
5) Email address : dediruswandi2000@yahoo.com

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ABSTRACT

Multi-environment testing is a critical phase to select superior hybrid having consistency performance in wide environment or to select superior hybrid showing best performance in a narrow environment. Twenty five sweetcorn hybrids belong to SR group were selected in three different locations in West Java, including: Jatinangor - Sumedang, Lembang – Bandung, Wanayasa, Purwakarta, to determine the interaction of genotype x environment, and to select new potential SR sweet corn hybrid based on its stability and adaptability. The sweet corn hybrids were planted based on a randomized complete design with three replications. Statistical analysis applied was analysis of variance, combined analysis of variance, and AMMI analysis. Result of the experiment indicated that there was an interaction genotype x environment for yield. Preliminary METs in West Java successfully selected newly developed sweetcorn hybrids based on stability and adaptability. These hybrids are SR 27 and SR 30, as stable and wide adaptive cultivars and SR 28, SR 31, SR 15 as specific adaptive cultivars.The multienvironment test suggested to further continue the test in broader range of locations and seasons to acurately revealed factor influencing the performance of sweetcorn in Indonesia and to select better hybrid for either broad or specific environment.