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Estimation of Stability Parameters for Crude Protein Content (%) in Forage Maize (*Zea Mays* L.) Accessions Under Different Environmental Conditions

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Abstract: *Stability analysis for crude protein content (%) using Eberhart and Russel model were worked out in one hundred and one forage maize accessions including African Tall. These accessions were collected from Uttar Pradesh, Madhya Pradesh and Rajasthan through a series of exploration and collection program. Each entry was sown in randomized block design having three replications on well-prepared land with optimum moisture for germination. Observation on various parameters contributing to fodder yield potential were recorded at 50% silking stage of the accessions. Estimation of the crude protein content was done as per the method suggested in A.O.A.C. (1990). In case of crude protein content simultaneous consideration of two-stability parameters, regression coefficient (bi) and sum of square deviation (S2di) suggested the absence of G x E interaction in 54 accessions as the estimates of both these parameters were non- significant in such cases. Maximum crude protein content was observed in IC-334841 (12.24) and IC-334920 (12.12), which was stable in all kind of environments. Highest range of crude protein in forage maize is 11.54- 12.24. Lowest crude protein content (%) was recorded in African Tall (8.66), which was below average in response (bi = 4.56*), therefore, it was stable for unfavourable environments. Among the accessions, three accessions namely IC-334836, IC-334880 and IC-335094 were found unstable.*

Keywords: Forage maize, stability analysis, G x E interaction, crude protein content (%)