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ASSOCIATION OF GRAIN YIELD WITH ITS ECONOMIC CHARACTERS IN WHEAT UNDER DIFFERENT SOWING RATES AND METHODS

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ABSTRACT

A field trial was conducted to assess the association of grain yield with its economic characters under varying sowing rates and methods in wheat, at Agronomy Experimental Field, Agriculture Research Institute Tando Jam, during winter (Rabi), 1989-90. Variety Mehran-89 was sown using drilling, broadcasting and broadcasting in standing water methods, with seed rates of 100, 125 and 150 Kg/ha. Grain yield had strong and positive association with plant height, tillers/plant, ear head length and spikeletes/spike respectively. It was noted that the magnitude of correlation for plant height and ear head length was higher under seed drilling with maximum seed rates. Where as, the magnitude of association for tillers/plant was superior in case of seed broadcasting with lower or high seed rates. It was suggested that plant height, tillers/ plant, ear head length and spikeletes/spike are important characters in wheat variety Mehran-89 and can be used as grain yield predictor, for obtaining better production, seed may be drilled with a seed rate of 125 Kg/ha.

INTRODUCTION

Grain yield is a complex character correlated with vegetative, reproductive and environmental factors (Worley *et al.*, 1976). Correlation studies of agronomic and morphological characters are helpful in identification of the components of a complex character such as grain yield.

Keeping in view the above facts the present experiment was coducted to assess the association between grain yield and its economic characters in wheat under different sowing rates and methods.

MATERIALS AND METHODS

This study was established to assess the association of grain yield and its economic characters in wheat undervarying sowing rates and methods at the Experimental