

Yield Performance of Two Locally Adapted and Two Introductions of Common Cowpea in Response to Amended In-Row-Spaces and Planting Dates

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Abstract : A field experiment was conducted in the Agricultural Research Station, at El-Ghoraieb, Assiut to study dry seed yield performance of two locally adapted cultivars ('Azmerly' and 'Cream 7') and two line introductions (IT81D-1032 and IT82D-812) of common cowpea (*Vigna unguiculata* (L.) Walp) grown at three different within-row spaces (20, 30 and 40 cm) and two planting dates in the summer (April 15th and 30th) and in the fall season (Aug. 12th and 27th) of two successive seasons. The data showed that total dry-seed yield produced by plants grown at 20 cm was greater than at 30 cm in all cvs/lines in both years. Increases in 1000-seed weight were detected in cv 'Azmerly' and line IT82D-812 when they were grown at 30 cm as compared with 20 cm in the summer season. However, in the fall season such increases were found in all cvs/lines. Planting at 40 cm produced seeds of greater weight than planting at 30 cm for all cvs/lines in the fall season and also in cv. Cream 7 and line IT82D-812 in the summer season. Planting on April 15th in the summer and also planting on Aug. 12th in the fall had plants which showed increases in 1000-seed weight and total dry-seed yield. The greatest 1000-seed weight was found in the line IT81D-1032 in the summer season and in the line IT82D-812 in the fall season. The sum up results revealed that 'Azmerly' produced greater dry-seed yield than 'Cream 7' and both of them were superior to the line IT82D-812 and IT81D-1032 in the summer season. In the fall, however, the line IT82D-812 produced greater dry-seed yield than the other cultivars/lines.

Keywords : Cowpea, Assiut, fall, planting dates, El-Ghoraieb, dry-seed yield

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