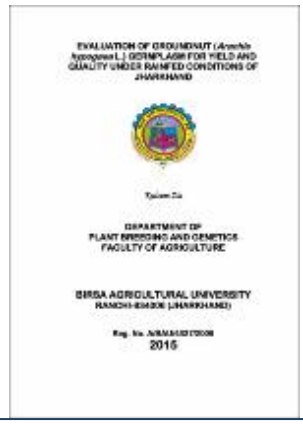
Authors:	Zia, Kulsum (/browse?type=author&value=Zia%2C+Kulsum)
Advisor:	Tirkey, S.K. (/browse?type=author&value=Tirkey%2C+S.K.)
Title:	EVALUATION OF GROUNDNUT (Arachis hypogaea L.) GERMPLASM FOR YIELD AND QUALITY UNDER RAINFED CONDITIONS OF JHARKHAND
Publisher:	Birsa Agricultural University, Kanke, Ranchi, Jharkhand
Language:	en_US
Type:	Thesis
Pages:	55
Agrotags:	null
Keywords:	EVALUATION OF GROUNDNUT (Arachis hypogaea L.) GERMPLASM FOR YIELD AND QUALITY UNDER RAINFED CONDITIONS OF JHARKHAND

Abstract:	The present investigation was carried out on forty three groundnut (Arachis hypogaea L.) genotypes. The material was sown in two replications in randomized block design during kharif season of 2014. The plant characters studied were Days to germination, Initial plant population, Final plant population, Days to 1st flowering, Days to 50 percent flowering, Days to maturity, Number of pods per plant, Pod yield per plant(g), Pod yield per plot (g), Pod yield per hectare (kg), Shelling percentage, Kernel yield per hectare (kg), Sound Mature Kernel per cent (SMK), 100-kernel weight(g), Oil content (%), Protein content (%), Scoring of early leaf spot disease (modified 9 point scale) and Aflatoxin (%) . The observed data were analysed and genetical parameters, viz. variability, heritability (broad sense) genetic advance and correlation coefficients. Analysis of variance for all the above quantitative characters revealed highly significant differences among the forty three genotypes. High genotypic and phenotypic variance was recorded for the characters pod yield per hectare, pod yield per plot and pod yield per plot. High genotypic and phenotypic coefficients of variability were recorded for number of pods per plant and hundred kernel weight. High genetic advance as percent of mean accompanied with high heritability were found for hundred kernel weight and high genetic advance as percent of mean accompanied with moderate heritability were found for number of pods per plant. The genotypic correlation of pod yield per plot was positive and highly significant with pod yield per plant, 100 kernel weight and also, positive and significant correlation with days to first flowering and days to 50 per cent flowering. The phenotypic correlation of pod yield per plot was positive and highly significant with pod yield per plant and 100 kernel weights. The superior genotypes identified for pod yield were BG-3, BG-4, BAUG-6, BAUG-16, BAUG-20, Birsa Bold, Bero Local, ICGX050147, ICGX040063, JSP-51, JSP-53, JSP-55, CSMG-2006-31, CSMG-2005-28 and NRCGCS-425 and for oil per cent were BG-4, BAUG-20 and ICGS-76. BG-4 and BAUG-20 were found superior for both pod yield and oil per cent. To sum up, it may be concluded that selection based on 100-kernel weight and number of pods per plant could be advantageous for future breeding programme of groundnut.
Description:	EVALUATION OF GROUNDNUT (Arachis hypogaea L.) GERMPLASM FOR YIELD AND QUALITY UNDER RAINFED CONDITIONS OF JHARKHAND
Subject:	Genetics and Plant Breeding
Theme:	EVALUATION OF GROUNDNUT (Arachis hypogaea L.) GERMPLASM FOR YIELD AND QUALITY UNDER RAINFED CONDITIONS OF JHARKHAND
These Type:	M.Sc
Issue Date:	2015
Appears in Collections:	Thesis (/handle/1/93550)

Files in This Item:

File	Description	Size	Format

1551 Kulsum Zia.pdf	2.7 MB	Adobe PDF



View/Open (/displaybitstream?handle=1/5810019784)

Show full item record (/handle/1/5810019784?mode=full)

(/handle/1/5810019784/statistics)