Click www.researchjournal.co.in/online/subdetail.html to purchase.

INTERNATIONAL JOURNAL OF PLANT PROTECTION VOLUME 9 | ISSUE 1 | APRIL, 2016 | 91-96

• e ISSN-0976-6855 | Visit us : www.researchjournal.co.in



RESEARCH PAPER

DOI: 10.15740/HAS/IJPP/9.1/91-96

Screening of different germplasm of chickpea against pulse beetle (*Callosobruchus chinensis* L.) and its relationship with quality parameters

■ ARUN KUMAR SINGH*, NITIN VIKRAM¹ AND R.K. PANDEY

Department of Entomology, Narendra Deva University of Agriculture and Technology, Narendra Nagar (Kumarganj), FAIZABAD (U.P.) INDIA

¹Department of Biochemistry, Narendra Deva University of Agriculture and Technology, Narendra Nagar, (Kumarganj), FAIZABAD (U.P.) INDIA

ARITCLE INFO

Received : 30.12.2015 **Revised** : 11.02.2016 **Accepted** : 25.02.2016

KEY WORDS:

Germplasm, Moisture, Infestation, Germination, Protein, Fat, Pulse beetle

ABSTRACT

Ten germplasm of stored chickpea were tested for their resistance against pulse beetle, *Callosobruchus chinensis* L. under laboratory conditions during the year 2013 and 2014 at the Department of Entomology, Narendra Deva University of Agriculture and Technology, Kumarganj- Faizabad. In above germplasm, the per cent seed moisture, per cent seed infestation, per cent seed germination and chemical composition of the seed were evaluated on the basis of their storage period before and after three months of storage. The results revealed that none of the germplasm was completely immune to the attack of C. chinensis. However, their response varied statistically significantly. Per cent infestation being main index of resistance, germplasm DCP 92-3 was found significantly highly tolerant and BG-256 least tolerant followed by NDG11-5, NDGK 98-8, NDG 93-1, NDG 97-1, IPC 2004-52, BG-362, BG 50-28 and NDG 12-1, were significantly susceptible. The co-efficient of correlation between per cent infestation with per cent moisture content, protein content and fat content was positive significantly, and per cent germination was negative significant.

How to view point the article: Singh, Arun Kumar, Vikram, Nitin and Pandey, R.K. (2016). Screening of different germplasm of chickpea against pulse beetle (*Callosobruchus chinensis* L.) and its relationship with quality parameters. *Internat. J. Plant Protec.*, **9**(1): 91-96.

*Corresponding author: Email: arunent88@gmail.com