



**RESEARCH ARTICLE :**

## Role of morphological characters offering resistance/ susceptibility of pigeonpea genotypes to pod borer complex

■ NAVNEET RANA, JAYALAXMI GANGULI, SANDIP AGALE AND BHUPESH JOSHI

**ARTICLE CHRONICLE :**

**Received :**

10.07.2017;

**Accepted :**

25.07.2017

**SUMMARY :** Investigation on “Studies on morphological and biochemical basis of resistance against pod borer complex in pigeonpea (*Cajanus cajan* L.)” was conducted, at the Research cum Instructional Farm of Indira Gandhi Krishi Vishwavidyalaya, Raipur, Chhattisgarh during *Kharif - Rabi* 2012-13 and 2013-14, respectively. In the genotype screening against pod borer complex *viz.* *M. vitrata*, *H. armigera* and *M. obtusa*, it was found that the germplasm ICP 6996 showed minimum larval population, minimum pod damage, minimum grain damage, least pest susceptibility rating and gave maximum yield. The second least susceptible germplasm was ICP 7374, followed by ICP 7005, ICP 7406, ICP 7392, ICP 7404, ICP 7003, ICP 6994, ICP 7405, ICP 6999, ICP 7373, ICP 7391, ICP 7387, ICP 7393, Rajeevlochan, ICP 7398, ICP 7004, ICPL 87119, ICP 7379 and ICP 7409. Among the morphological parameters, it was observed that the pod wall thickness ( $r = -0.96^{**}$ ), calyx trichome's length ( $r = -0.65^{**}$ ), pod trichomes length ( $r = -0.90^{**}$ ), calyx trichome's density ( $r = -0.94^{**}$ ), pod trichomes density ( $r = -0.94^{**}$ ) and seed yield ( $r = -0.83^{**}$ ) showed highly significant negative correlation with per cent pod damage by pod borer complex.

**KEY WORDS :**

Pigeonpea, Pod borer, Germplasm

**How to cite this article :** Rana, Navneet, Ganguli, Jayalaxmi, Agale, Sandip and Joshi, Bhupesh (2017). Role of morphological characters offering resistance/ susceptibility of pigeonpea genotypes to pod borer complex. *Agric. Update*, 12(TECHSEAR-3) : 641-647; DOI: 10.15740/HAS/AU/12.TECHSEAR(3)2017/641-647.

**Author for correspondence :**

NAVNEET RANA

Department of  
Entomology, Indira  
Gandhi Krishi

Vishwavidyalaya,  
RAIPUR (C.G.) INDIA  
Email : [navneetrana95@  
gmail.com](mailto:navneetrana95@gmail.com)

See end of the article for  
authors' affiliations