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**Abstract:** Among the oilseed crops soybean(Glycine max.L.merrill) is regarded globally as most important oilseed crop.It is cultivated throughout the world & in india with the coverage of 8.87 million hectare,production of 9.46 million tones & productivity around 1067 Kg/hectare,Soybean has occupied important place in agriculture and oil economy of India. Eight genotypes were evaluated through the formula suggested by Eberhart and Russel (1966) for stability behaviour for four environment viz. E1 (Kanke), E2 (Darisai), E3 (Dumka) and E4( Chianki) in kharif 2007 for ten characters namely Plant height(cm), Number of branch per plant, Number of pod per plant, Days to 50% flowering, 100 seed weight(g), Days to maturity, Number of seed per pod, Grain yield(Kg/plot),Protein content(%),Oil content(%). Analysis of variance showed highly significant difference among the genotype for all the character except plant height and days to 50% flowering. The high genotypic coefficient of variation(GCV) & phenotypic coefficient of variation(PCV) was observed in number of seed per pod & grain yield. High heritability coupled with high genetic advance was observed in number of seed per pod,It clearly indicates that most likely the heritability is due to additive gene effects and selection may be effective. High heritability coupled with moderate genetic advance was observed in plant height, number of pod per plant and 100 seed weight. When G X E tested against pooled deviation protein and oil content were significant whereas highly significant G X E interaction was faced for number of branch per plant,number of pod per plant,100 seed weight,days to maturity,number of seed per pod and grain yield(Kg/plot). Six genotypes namely BAUS-96,BAUS-40,JS 97-52,BS-1,RAUS-5 & JS 335 genotypes were stable for number of branch per plant whereas in case of number of pod per plant all the genotypes were stable except JS 335.Four genotypes BAUS- 96,BAUS-40,JS 80-21 & RAUS-5 were recorded as stable genotypes for 100 seed weight,for days to maturity genotype JS 80-21 was the most stable over a wide range of environment.Stability for number of seed per pod in varied environment condition was noticed in four genotypes namely BAUS-31,BAUS-40,JS 97-52,JS 8021 & were noted to be most stable for number of seed per pod.Six variety BAUS-96,BAUS-40,BS-1,BAUS- 31,JS 97-52 & JS 335 were recorded as most stable genotypes for grain yield(Kg/plot).For oil content,two genotypes RAUS-5 & BS-1 were found stable & for protein content all the genotypes are stable but BAUS-40 was most stable genotype.

**Description:** STABILITY STUDY IN SOYBEAN (Glycine max(L) Merrill) VARIETIES

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