Table 1. Screening of certain green gram varieties/genotypes against whitefly, *B. tabaci* during *kharif* 2014 and 2015 (Pooled)

Tr. No.	Varieties/ genotypes	*Mean population of *B. tabaci* cage^{-1}								
		35th SMW	36th SMW	37th SMW	38th SMW	39th SMW	40th SMW	41th SMW	Overall mean	Yield (q ha^{-1})
T_1	PM-5	1.20 (1.30)	1.70 (1.48)	2.60 (1.76)	4.13 (2.15)	4.87 (2.32)	4.20 (2.17)	2.47 (1.72)	3.02 (1.88)	7.72
T_2	IPM 2K 14-9	1.93 (1.56)	2.40 (1.70)	3.70 (2.05)	5.30 (2.41)	6.77 (2.70)	5.80 (2.51)	4.70 (2.28)	4.37 (2.21)	6.22
T_3	HUM-1	1.50 (1.41)	2.00 (1.58)	3.10 (1.90)	4.63 (2.27)	5.57 (2.46)	4.83 (2.31)	3.70 (2.05)	3.62 (2.03)	6.40
T_4	ML 1257	2.63 (1.77)	3.07 (1.89)	5.17 (2.38)	7.23 (2.78)	8.63 (3.02)	7.30 (2.79)	6.30 (2.61)	5.76 (2.50)	4.73
T_5	Pusa 672	2.10 (1.61)	2.73 (1.80)	4.40 (2.21)	5.83 (2.52)	7.43 (2.82)	6.00 (2.55)	5.70 (2.49)	4.89 (2.32)	5.77
T_6	IPM 306-6	2.93 (1.85)	3.77 (2.07)	6.30 (2.61)	9.60 (3.18)	12.00 (3.54)	9.53 (3.17)	8.63 (3.02)	7.54 (2.84)	3.11
T_7	SM 48	3.17 (1.91)	4.37 (2.21)	7.63 (2.85)	10.87 (3.37)	12.73 (3.64)	10.93 (3.38)	9.47 (3.16)	8.45 (2.99)	3.33
T_8	IPM 05-3-22	2.63 (1.77)	3.27 (1.94)	5.40 (2.43)	7.73 (2.87)	8.80 (3.05)	7.60 (2.85)	6.80 (2.70)	6.03 (2.56)	3.23
T_9	Pusa Bold 2	1.97 (1.57)	2.53 (1.74)	4.03 (2.13)	5.50 (2.45)	7.00 (2.74)	5.73 (2.50)	5.43 (2.44)	4.60 (2.26)	5.99
T_{10}	IPM-9901-10	2.53 (1.74)	2.93 (1.85)	5.03 (2.35)	6.73 (2.69)	7.93 (2.90)	6.77 (2.70)	6.27 (2.60)	5.46 (2.44)	5.09
T_{11}	HUM-16	1.60 (1.45)	2.10 (1.61)	3.27 (1.94)	5.03 (2.35)	6.03 (2.56)	5.13 (2.37)	4.30 (2.19)	3.92 (2.10)	6.58
T_{12}	IPM 306-1	1.33 (1.35)	1.90 (1.55)	3.03 (1.88)	4.57 (2.25)	5.40 (2.43)	4.63 (2.27)	3.73 (2.06)	3.51 (2.00)	6.96
T_{13}	PM 4	1.83 (1.53)	2.27 (1.66)	3.53 (2.01)	5.40 (2.43)	6.50 (2.65)	5.43 (2.44)	4.70 (2.28)	4.24 (2.18)	5.26
T_{14}	ML 5	3.37 (1.97)	4.63 (2.27)	8.07 (2.93)	11.97 (3.53)	14.03 (3.81)	11.37 (3.44)	10.40 (3.30)	9.12 (3.10)	3.30
T_{15}	ML 1256	2.30 (1.67)	2.80 (1.82)	4.87 (2.32)	6.50 (2.65)	7.83 (2.89)	6.53 (2.65)	5.47 (2.44)	5.19 (2.38)	5.54
T_{16}	ML 1059	2.70 (1.79)	3.90 (2.10)	7.27 (2.79)	10.03 (3.25)	12.57 (3.61)	10.37 (3.30)	9.00 (3.08)	7.98 (2.91)	4.41
T_{17}	SML 191	2.83 (1.83)	3.53 (2.01)	5.87 (2.52)	8.33 (2.97)	10.67 (3.34)	8.70 (3.03)	7.47 (2.82)	6.77 (2.70)	4.04
T_{18}	ML 515	2.73 (1.80)	3.40 (1.97)	5.50 (2.45)	7.80 (2.88)	9.37 (3.14)	8.13 (2.94)	6.93 (2.73)	6.27 (2.60)	4.17
T_{19}	PDM 288	2.90 (1.84)	3.70 (2.05)	6.20 (2.59)	9.50 (3.16)	11.23 (3.43)	9.33 (3.14)	7.77 (2.88)	7.23 (2.78)	3.78
T_{20}	HUM-12	2.73 (1.80)	3.27 (1.94)	5.60 (2.47)	8.00 (2.92)	9.93 (3.23)	8.33 (2.97)	7.30 (2.79)	6.45 (2.64)	4.13
S.E.m.±		(0.05)	(0.04)	(0.04)	(0.07)	(0.06)	(0.05)	(0.05)	(0.03)	0.37
$CD_{(P=0.05)}$		(0.14)	(0.13)	(0.12)	(0.20)	(0.16)	(0.15)	(0.16)	(0.08)	1.07

Figures in parentheses $\sqrt{x} + 0.5$ transformed values; SMW- Standard Meteorological Week; *Mean of three replications

during 39th SMW. Thus, the incidence was more at vegetative to pre-reproductive stage. Dar et al. (2002) observed its population from 16th to 26th standard week with a peak during the 25th standard week.

During *kharif* 2014 the overall mean population was maximum with the genotype ML 5 (7.64 whitefly/cage) which was at par with SM 48 (7.07 whitefly cage^{-1}), ML 1059 (6.89 whitefly cage^{-1}); the least was in PM-5 (2.93 whitefly cage^{-1}) as against local check HUM 12 (5.50 whitefly cage^{-1}).. Almost similar trend was also observed during kharif 2015. The pooled data revealed that the population varied significantly and ranged from 3.02 to 9.12 whitefly cage^{-1}, with maximum population being in ML 5 (9.12 whitefly cage^{-1}) followed by SM 48 (8.45 whitefly cage^{-1}). and ML 1059 (7.98 whitefly cage^{-1}); the least population was in PM-5 (3.02 whitefly cage^{-1}), with the population in local check cultivar, HUM-12 being 6.45 whitefly cage^{-1}.

These results agree with those of Sekar and Nalini (2017) who observed that incidence ranged from 2.5 to 7.7 No./3 leaves; and those of Khaliq et al. (2017) who observed that Pant Moong-1 was found to be moderately resistant. The observations of Singh and Singh (2014), Panduranga et al. (2011) and Kooner and Cheema (2007) also corroborate with the present ones.

The grain yield revealed significant differences-during *kharif* 2014 it ranged from 3.15 to 7.04 q ha^{-1} with maximum being with PM-5 (7.04 q ha^{-1}), IPM 306-1 (6.45 q ha^{-1}) and HUM-16 (6.21 q ha^{-1}). During *kharif* 2015, again the maximum yield was in PM-5 (8.39 q/ha). The pooled mean of *kharif* 2014 and 2015 indicated that maximum grain yield was obtained from genotype PM-5 (7.72 q ha^{-1}). These results corroborate with those of Singh and Singh (2014), Panduranga et al. (2011) and Khaliq et al. (2017) who observed maximum yield with genotypes that are less infested with.

It can be concluded that variety PM-5 and by IPM 306-1 with less susceptibility against the attack *B. tabaci* can be used as a source of resistance.

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