

## Short Communication

### Screening Wheat Genotypes Against *Petrobia latens* (Muller)

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*Petrobia latens* (Muller) (Tetranychidae: Acarina) is widely distributed mite species known from Europe, North Africa, Australia, Asia and North America. It has also been recognized as an important agricultural mite pest in South Western and Western United States of America with a wide range of hosts (Pritchard and Baker, 1955) consisting chiefly of monocotyledonous plants. The first mention of this pest from India was by Bindra and Kittur (1961).

The larvae, nymph and adults of the mite feed on both the surfaces of the leaf causing drying from tip backwards. The plant becomes chlorotic due to loss of cell sap, resulting in unhealthy grain formation. Heavy infestation leads to sickly yellowish or browning appearance. The present paper gives an account of the incidence of the pest on different wheat varieties/genotypes that were sown on Asalpur farm of the SKN College of Agriculture, Jobner, in 2x2 m plots. Fifteen varieties/genotypes of wheat were raised for screening against *P. latens* by adopting recommended package of practices.

The mite population was recorded following Khan *et al.* (1977) one month after sowing at weekly interval till crop was harvested. The population was recorded randomly from three pre-ear marked spots, i.e., from 2nd, 4th and 6th row of the plot between 12.00 and 14.00 hrs. The population count in each variety/genotype was recorded in

laboratory under binocular microscope and expressed as number of mites per 10 cm<sup>2</sup> slide area.

The mite population on all the varieties/genotypes was low in the beginning and it increased gradually reaching a peak on 13th March 1995 (Table 1). Thereafter, the population slowly declined. No population was recorded after 4th April 1995.

The observations on mite population from 6th February to 4th April 1995 revealed that the population was highest on variety C-306, followed by UP-2338, suggesting that these were the most susceptible among the 15 genotypes evaluated. The third variety, in order of susceptibility was, Raj-1482 except during the first observation where it ranked in the middle order of susceptibility. The variety, Sonalika, proved to be the most resistant followed by HD-2329 and WL-711, throughout the pest incidence. The rest of the varieties/genotypes showed intermediate levels of susceptibility/tolerance. None of the varieties/genotypes was completely free from the pest. This finding is in agreement with those of Vyas *et al.* (1973), Deol *et al.* (1980) and Singh (1986) who also observed that none of the wheat varieties/genotypes was free from the attack of the mite.

The relative susceptibility of the genotype to the mite in descending order was: Sonalika > HD-2329 > WL-711 > Raj-2525 > Raj-1972 > PBW-226 > PAN-3004 > WH-5

Table 1. Population of brown wheat mite, *P. latens* on different wheat genotypes during rabi, 1994-95.

Genotype	Mean mite population per 10 cm <sup>2</sup> area at weekly interval								
	Feb. 6	Feb. 13	Feb. 20	Feb. 27	Mar. 6	Mar. 13	Mar. 20	Mar. 27	Apr. 3
Sonalika	0.00 (0.71)	0.31 (0.89)	0.44 (0.96)	0.85 (1.15)	1.10 (1.28)	1.69 (1.47)	0.85 (1.14)	0.18 (0.81)	0.00 (0.71)
HD-2329	0.00 (0.71)	0.40 (0.95)	0.53 (1.00)	0.93 (1.19)	1.33 (1.35)	1.91 (1.53)	1.25 (1.30)	0.26 (0.87)	0.04 (0.73)
Raj-3077	0.04 (0.74)	1.07 (1.25)	1.86 (1.53)	2.40 (1.69)	2.79 (1.83)	3.73 (2.05)	3.02 (1.82)	0.62 (1.06)	0.22 (0.84)
WL-711	0.00 (0.71)	0.53 (1.00)	0.62 (1.06)	1.56 (1.36)	1.37 (1.53)	2.22 (1.64)	1.87 (1.53)	0.31 (0.89)	0.09 (0.76)
Raj-2535	0.04 (0.74)	0.58 (1.03)	1.24 (1.25)	1.69 (1.47)	2.31 (1.67)	2.58 (1.75)	2.18 (1.62)	0.36 (0.91)	0.09 (0.76)
Raj-1972	0.09 (0.76)	0.67 (1.08)	1.47 (1.38)	1.96 (1.55)	2.40 (1.69)	2.67 (1.77)	2.27 (1.66)	0.43 (0.94)	0.13 (0.79)
Raj-1555	0.13 (0.79)	1.20 (1.22)	1.96 (1.49)	2.49 (1.73)	3.02 (1.86)	3.87 (2.08)	3.33 (1.96)	0.67 (1.07)	0.27 (0.87)
PBW-226	0.09 (0.76)	0.71 (1.09)	1.60 (1.43)	2.22 (1.64)	2.49 (1.72)	2.76 (1.79)	2.40 (1.68)	0.43 (0.94)	0.13 (0.79)
Raj-1482	0.13 (0.79)	1.33 (1.35)	2.09 (1.59)	2.67 (1.77)	3.33 (1.94)	4.05 (2.13)	3.47 (1.98)	0.76 (1.11)	0.31 (0.89)
CPAN-3004	0.31 (0.89)	0.89 (1.17)	1.68 (1.46)	2.22 (1.64)	2.58 (1.75)	2.39 (1.83)	2.40 (1.68)	0.45 (0.97)	0.13 (0.79)
WH-542	0.22 (0.84)	0.98 (1.20)	1.73 (1.47)	2.32 (1.68)	2.66 (1.77)	2.98 (1.85)	2.58 (1.70)	0.49 (0.99)	0.18 (0.81)
PBW-34	0.31 (0.89)	0.93 (1.19)	1.73 (1.47)	2.31 (1.65)	2.85 (1.81)	3.55 (2.01)	2.67 (1.77)	0.58 (1.02)	0.18 (0.81)
PDW-215	0.45 (0.97)	1.02 (1.22)	1.78 (1.50)	2.40 (1.69)	2.71 (1.78)	3.47 (1.99)	2.62 (1.76)	0.53 (1.00)	0.18 (0.81)
UP-2338	0.58 (1.03)	1.60 (1.44)	2.40 (1.68)	2.89 (1.83)	3.33 (1.94)	4.89 (2.31)	3.53 (2.00)	0.84 (1.15)	0.36 (0.91)
C-306	0.71 (1.09)	1.68 (1.47)	3.29 (1.94)	4.24 (2.12)	4.71 (2.27)	5.51 (2.44)	3.67 (2.02)	1.07 (1.24)	0.40 (0.95)
S.Em ±	(0.052)	(0.091)	(0.19)	(0.15)	(0.12)	(0.98)	(0.14)	(0.074)	(0.058)
CD at 5%	(0.16)	(0.27)	(0.58)	(0.45)	(0.37)	(0.29)	(0.42)	(0.22)	(0.17)
C.V.	11.03	13.50	20.94	16.11	12.60	8.91	14.28	12.88	12.38

Figures in parentheses are  $\sqrt{X + 0.5}$  transformed values.

42 > PDW-215 > PBW-34 > Raj-3077 > Raj-1555 > Raj-1482 > UP-2338 > C-306.

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