

**A new allele,  $st^{bs}$ , at the  $St$  locus**

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In 1980 at Wiatrowo, two independently induced mutant lines, Wt11301 and Wt11311, with stipules of reduced size (so called "butterfly stipules") were selected following treatment of cv. Paloma with 200r Nf + 0.014% NEU. Segregation in the  $M_2$  families showed the recessive nature of both mutants. Reciprocal crosses between Wt11311 and Wt11301 showed the two mutations were at the same locus. The  $F_1$  plants from reciprocal crosses between Wt11311 and Wt11288 ( $st$  = stipules reduced) had butterfly stipules and the  $F_2$  segregated in accordance with the ratio 3 butterfly stipules : 1 reduced stipules. Thus it appeared that the trait butterfly stipules is controlled by an allele dominant to  $st$  but recessive to  $St$  (normal, wild-type stipules). We suggest symbol  $st^{bs}$  for the intermediate allele conferring butterfly stipules. The three phenotypes are illustrated in Fig. 1.

No significant linkages were detected for chromosome 3 markers  $st$ ,  $b$  and  $m$  in the  $F_2$  of cross Wt11311 ( $st^{bs} B m$ ) x Wt11288 ( $st b M$ ), but a selection with genotype  $st^{bs} b M$  was isolated and included in the Genetics Stock Centre as Wt11323. The larger surface area of  $st^{bs}$  stipules (instead of the strongly reduced  $st$  stipules) is sometimes useful in cases where other markers influencing stipule traits (e.g.  $wb$ ,  $sil$ ) are under study.

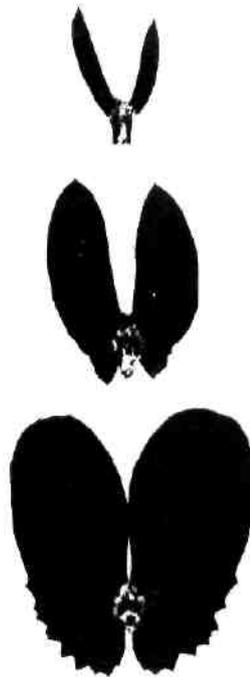


Fig. 1. The stipule phenotype conferred by alleles  $St$  (bottom),  $st^{bs}$  (middle) and  $st$  (top). The dominance order is  $St > st^{bs} > st$ .