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 M2 families showed the recessive nature of both mutants. Reciprocal crosses between Wt11311 and Wt11301 showed the two mutations were at the same locus. The F1 plants from reciprocal crosses between Wt11311 and Wt11288 ($st =$ stipules reduced) had butterfly stipules and the F2 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 F2 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 $St > st^{bs} > st$. 