

Simmonds, Margaret (1986). "A Comparison of Growth and Competitive Ability between the Two Seed Types of *Xanthium Strumarium*".

The purpose of this study was threefold: 1) to study the effects of seed size on competitive relations, 2) to use the latter information to study the possible adaptive value of the polymorphic trait and 3) to determine what further differences exist between the two seed types (type L and type S). Results show no consistent evidence that one seed type emerges before the other. Further, there was no relationship between plant density and mortality, as only one out of the 1125 plants died. There was no difference in yield between seed types—deeming the polymorphic trait to be neither an advantage nor disadvantage. The study found that the heavier seeds, usually type L, are better competitors than the lighter S seeds when the two are grown in mixture. Finally, it is suggested that the only difference between the two seed types is a difference in seed weight.

(summary)