



**Figure S1 Phenotypic plasticity of populations to variation in block productivity.** Plasticity of vegetative and reproductive traits to variation in block productivity, measured as mean block spring diameter, in North Carolina for Spiterstulen, Mayodan, and F<sub>2</sub> populations. (A) PC1 ( $P < 0.001$  for population effects on plasticity); (B) spring diameter ( $P < 0.001$ ); (C) reproductive shoots (with square root transformation,  $P = 0.0077$ ); (D) siliques per shoot (with square root transformation,  $P = 0.0020$ ); and (e) net reproductive season diameter growth ( $P < 0.001$ ). Main effects of block productivity were highly significant for all traits ( $P < 0.001$ ). Estimates are from a mixed model, with population and block productivity treated as fixed effects, and family (or F<sub>2</sub> reciprocal) as random effects.