Supplementary Table S1. Likelihood-ratio tests used for fixed-effect model selection in mixed-effects models of survival, height, and RCD.

Response variable	Model comparison	χ^2	df	*p*-value	Decision
Survival	Full factorial model vs. model containing all two-way interactions	0.023	1	0.879	Three-way interaction removed
Survival	Model containing all two-way interactions vs. additive model	0.868	3	0.833	Two-way interactions removed; additive model retained
Height	Full factorial model vs. model containing all two-way interactions	2.297	1	0.130	Three-way interaction removed
Height	Two-way interaction model vs. reduced model excluding Fertilizer × Mulching	0.938	1	0.333	Fertilizer × Mulching interaction removed
Height	Reduced model vs. model excluding Type × Mulching	1.085	1	0.298	Type × Mulching interaction removed
Height	Model with Type × Fertilizer interaction vs. additive model	5.199	1	0.0226	Type × Fertilizer interaction retained
RCD	Full factorial model vs. model containing all two-way interactions	3.323	1	0.068	Three-way interaction removed
RCD	Two-way interaction model vs. reduced model excluding Type × Mulching	0.613	1	0.434	Type × Mulching interaction removed
RCD	Reduced model vs. model excluding Fertilizer × Mulching	1.555	1	0.212	Fertilizer × Mulching interaction removed
RCD	Model with Type × Fertilizer interaction vs. additive model	4.666	1	0.0308	Type × Fertilizer interaction retained

Note: Likelihood-ratio tests for LMM fixed-effect selection were based on models fitted using maximum likelihood. Final LMMs were subsequently refitted using restricted maximum likelihood for parameter estimation.

Supplementary Table S2. Sensitivity analyses of the propagation type × fertilization interaction using split-plot-level mean growth responses.

Response variable	Analysis	χ^2	df	*p*-value	Conclusion
Height	Model with Type × Fertilizer interaction vs. additive model	5.697	1	**0.0170**	Interaction retained
RCD	Model with Type × Fertilizer interaction vs. additive model	4.959	1	**0.0260**	Interaction retained

Note: Sensitivity analyses were conducted using the mean response of each of the 16 split plots, with plot included as a random intercept.