

S1 Fig. Full models and final models obtained after the model building approach for each parameter. Only significant terms were retained in final models.

Legends:

LogSM is Log(storage modulus)
 LogSTF is Log(stiffness)
 LogSTRAIN is Log(strain)
 type is type of wound
 cv is cultivar of *Linum usitatissimum*
 sample is individual

1 - Full models used to start the model-building approach:

(a) Storage Modulus

LogSM~LogSTRAIN*type*cv+(LogSTRAIN*type*cv|pot/sample)

(b) Stiffness

LogSTF~LogSTRAIN*type*cv+(LogSTRAIN*type*cv|pot/sample)

(c) Tan Delta

tan delta~strain*type*cv+(strain*type*cv|pot/sample)

(d) Plant Height at 95 DAS

H_95DAS~type*cv+(1|pot/sample))

(e) Plant Diameter at 95 DAS

diam~type*cv+(1|pot/sample)

2 - Final models retained after both random and fixed effects checking:

(a) Storage Modulus

LogSM~LogSTRAIN+type+cv+LogSTRAIN:type + LogSTRAIN:cv+(LogSTRAIN|sample)

(b) Stiffness

LogSTF~LogSTRAIN+type+cv+LogSTRAIN:type + LogSTRAIN:cv+(LogSTRAIN|sample)

(c) Tan Delta

lmer(tan delta~strain+type+cv+strain:cv+(strain|sample)

(d) Plant Height at 95 DAS

H_95DAS~type*cv+(1|pot/sample))

(e) Plant Diameter at 95 DAS

diam~type*cv+(1|pot/sample)