**Supplementary material**

**Omitting the application of nitrogen or potassium reduced the growth of young chestnut (*Castanea sativa*) trees, while a lack of boron decreased fruit yield**

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Figure S1. Leaf concentration of nutrients not included in the experimental design, from samples taken in July (J) (2019-2022), in response to fertilizer treatments in a nutrient omission trial. The control received all four nutrients (nitrogen, phosphorus, potassium, and boron, NPKB), while others received only three out of the four, with the missing nutrient marked with (-). LLSR and HLSR are the lower and higher limit of the sufficiency range, respectively. The vertical bars are the standard error of the variance analysis. \*, \*\* and \*\*\* significant differences at P < 0.05, P < 0.01 and P < 0.001; ns, not significant.