

1 **Partitioning of soil phosphorus among arbuscular and ectomycorrhizal trees**
2 **in tropical and subtropical forests**

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6 **Supplementary Information**

7 **Figure S1** The effects of added chemical forms of soil phosphorus on seedling root biomass of
8 tree species with (a) ectomycorrhizal and (b) arbuscular mycorrhizal associations in a tropical
9 rain forest and a subtropical evergreen broad-leaved forest.

10 **Figure S2** Relationship between the percentage colonization by mycorrhizal fungi and soil
11 extractable P (mg/g) in the shade-house experiments. Points with different colours and shapes
12 represent the 15 focal species. Solid line indicates regression model estimated by the linear
13 mixed-effects model, with study site, focal species, and block as random effects.

14 **Figure S3** Concentrations of soil total N in the P-treated soil of (a) ectomycorrhizal and (b)
15 arbuscular mycorrhizal species at the end of the shade-house experiments.

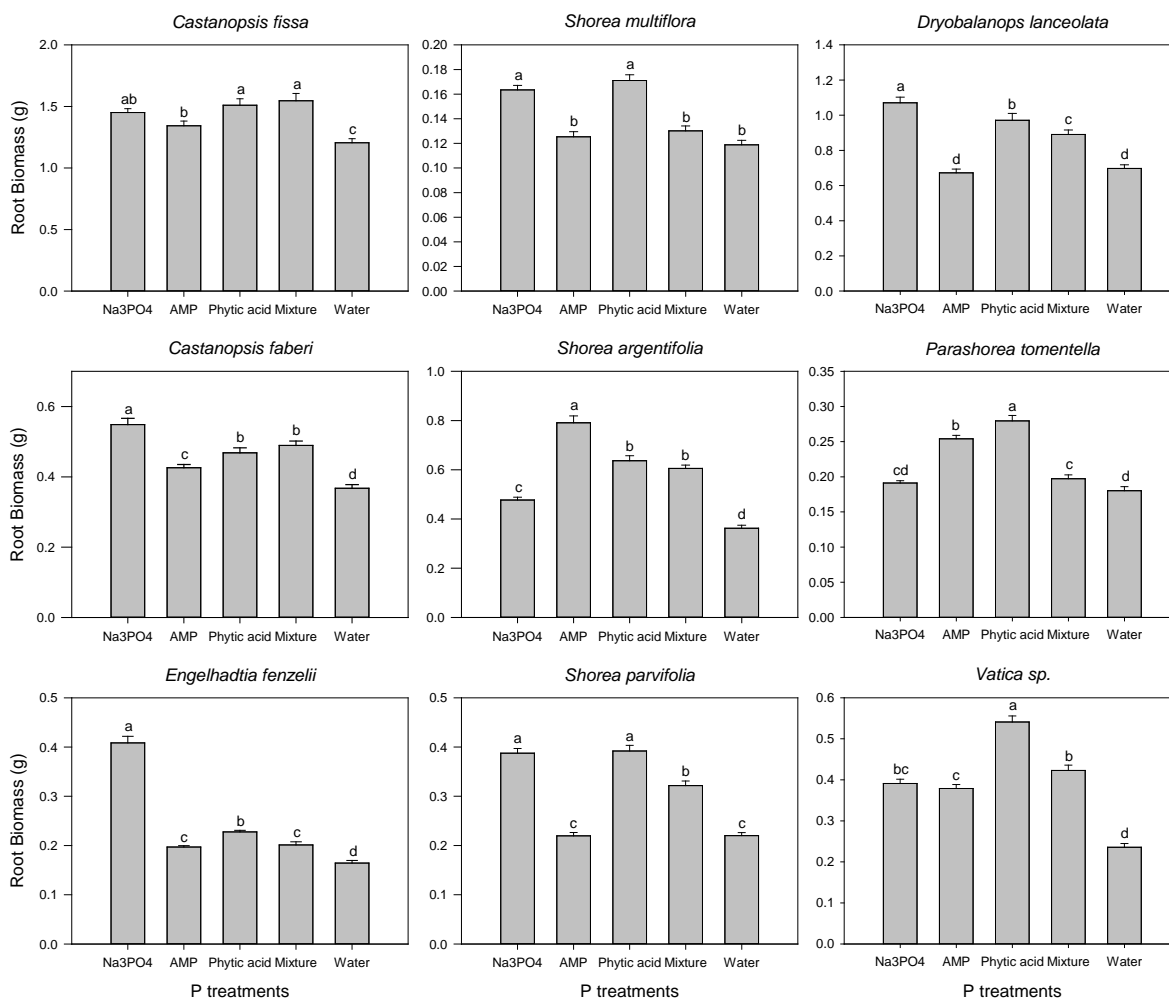
16 **Figure S4** Concentrations of soil total K in the P-treated soil of (a) ectomycorrhizal and (b)
17 arbuscular mycorrhizal species at the end of the shade-house experiments.

18 **Figure S5** Concentrations of soil total P in the P-treated soil of (a) ectomycorrhizal and (b)
19 arbuscular mycorrhizal species at the end of the shade-house experiments.

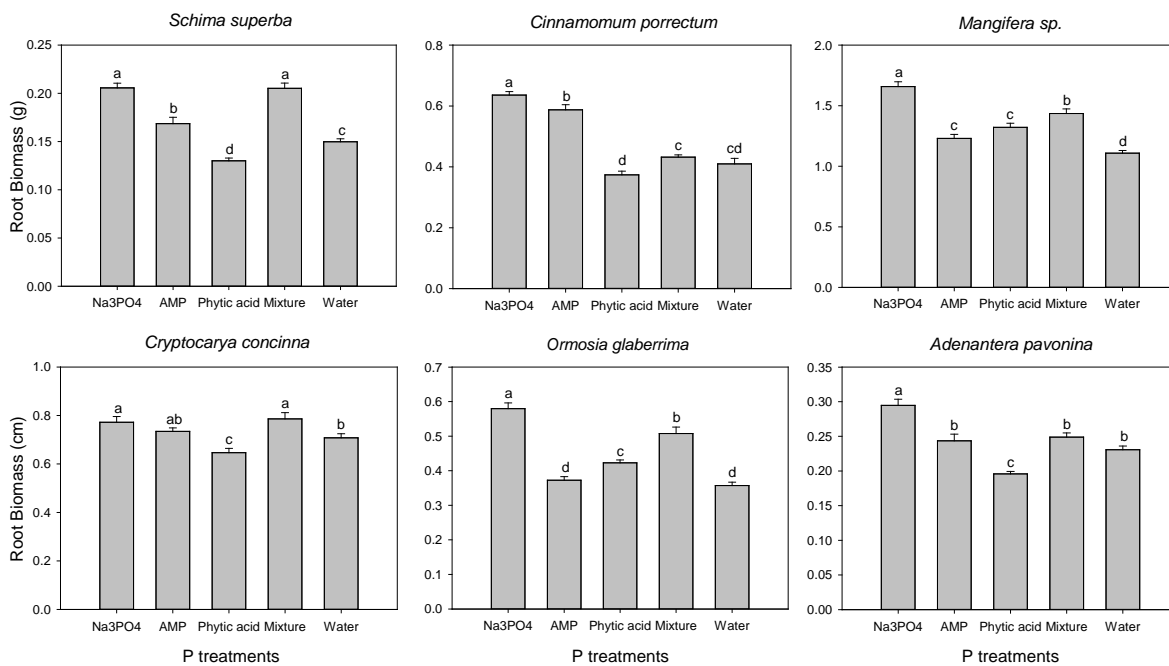
20 **Figure S6** Concentrations of soil available P in the P-treated soil of (a) ectomycorrhizal and
21 (b) arbuscular mycorrhizal species at the end of the shade-house experiments.

22 **Figure S1** The effects of added chemical forms of soil phosphorus on seedling root biomass of
23 tree species with (a) ectomycorrhizal and (b) arbuscular mycorrhizal associations in a tropical
24 rain forest and a subtropical evergreen broad-leaved forest. Bars show mean root biomass \pm SE
25 of each focal species in the shade-house experiments, when seedlings were treated with an
26 inorganic phosphorus form (Na_3PO_4), a simple organic P form ($\text{C}_{10}\text{H}_{14}\text{N}_5\text{O}_7\text{P}$, adenosine
27 monophosphate, AMP), a complex organic P form ($\text{C}_6\text{H}_{18}\text{O}_{24}\text{P}_6$, myo-inositol
28 hexakisphosphate, Phytic acid), a combination of these three forms ($1/3 \text{Na}_3\text{PO}_4 + 1/3 \text{AMP} +$
29 $1/3 \text{Phytic acid}$, Mixture), and a control treatment (Water). Different lowercase letters represent
30 significant differences among treatments ($P < 0.05$) based on one-way ANOVA.

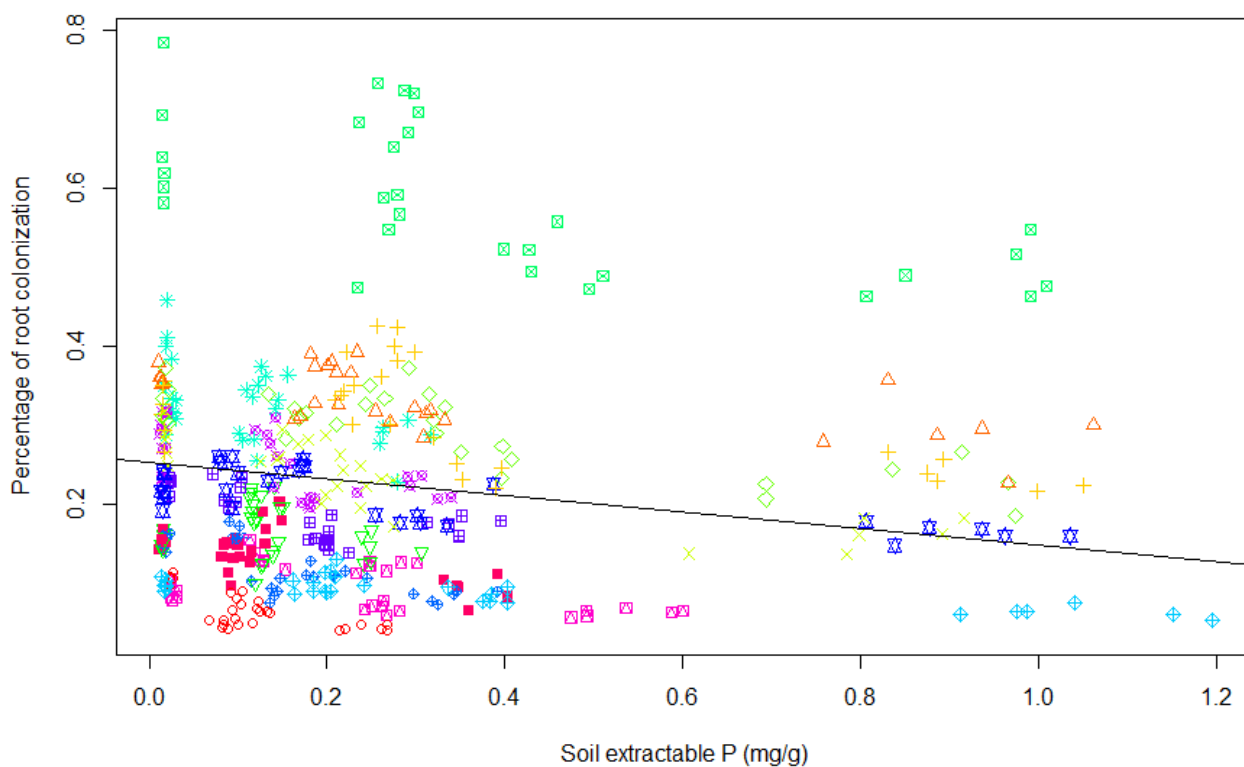
31 **Figure S1 (a)**



32 **Figure S1 (b)**



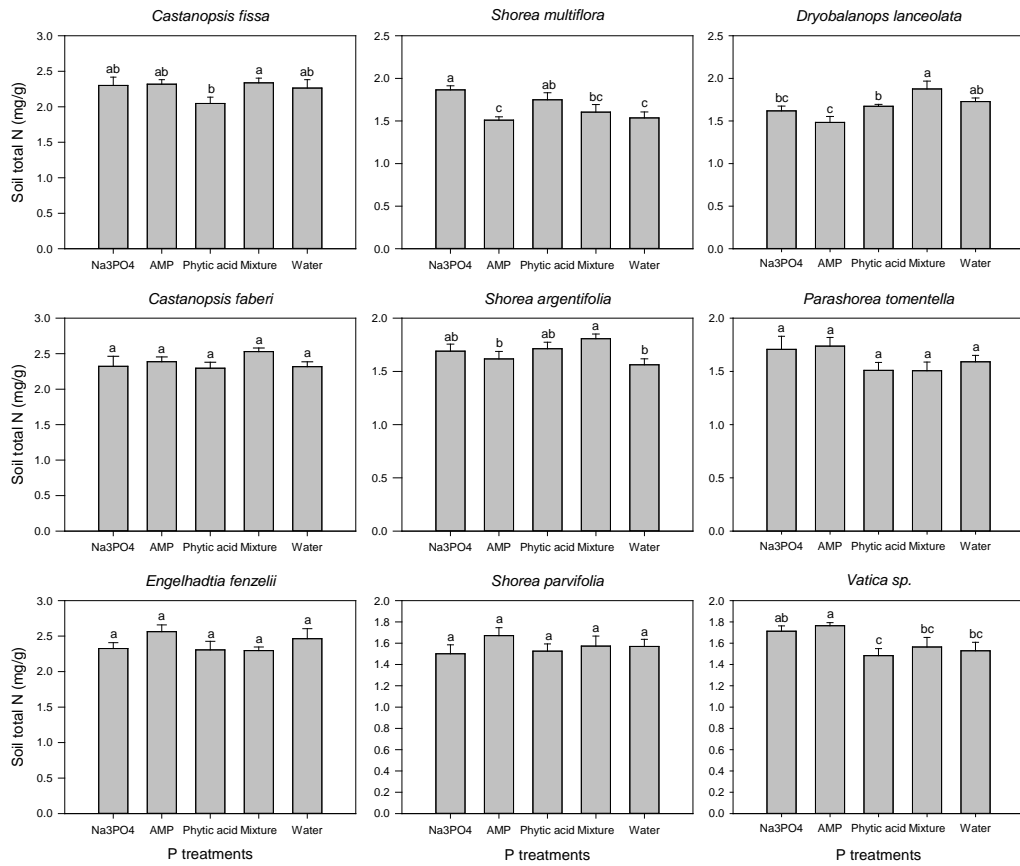
33 **Figure S2** Relationship between the percentage colonization by mycorrhizal fungi and soil
34 extractable P (mg/g) in the shade-house experiments. Points with different colours and shapes
35 represent the 15 focal species. Solid line indicates regression model estimated by the linear
36 mixed-effects model, with study site, focal species, and block as random effects.



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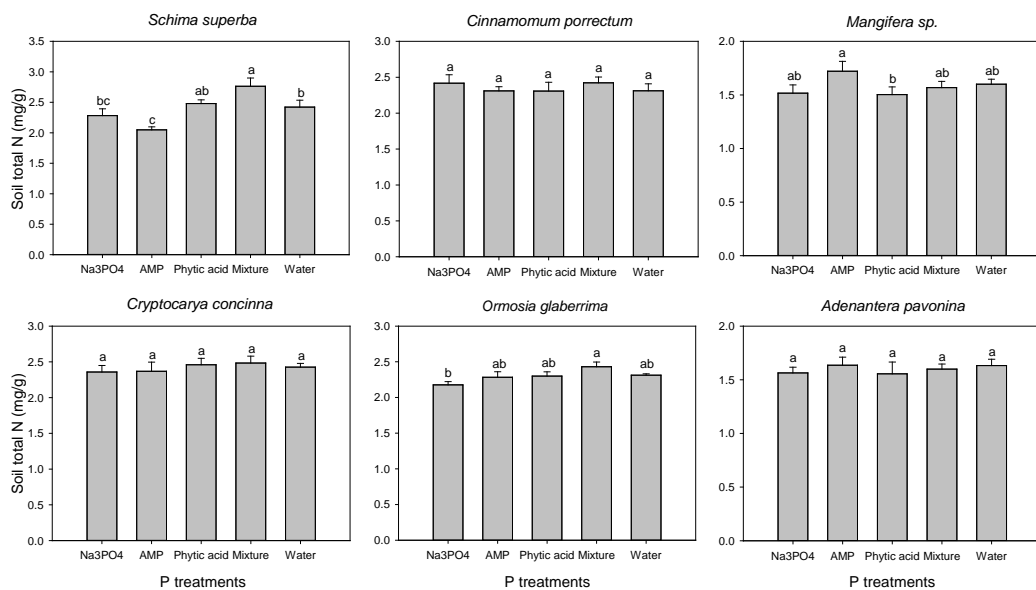
38 **Figure S3** Contents of soil total N in the P-treated soil of (a) ectomycorrhizal and (b) arbuscular
 39 mycorrhizal species at the end of the shade-house experiments. Bars are means with SE of each
 40 treatment for all 12 blocks.

41 **Figure S3 (a)**



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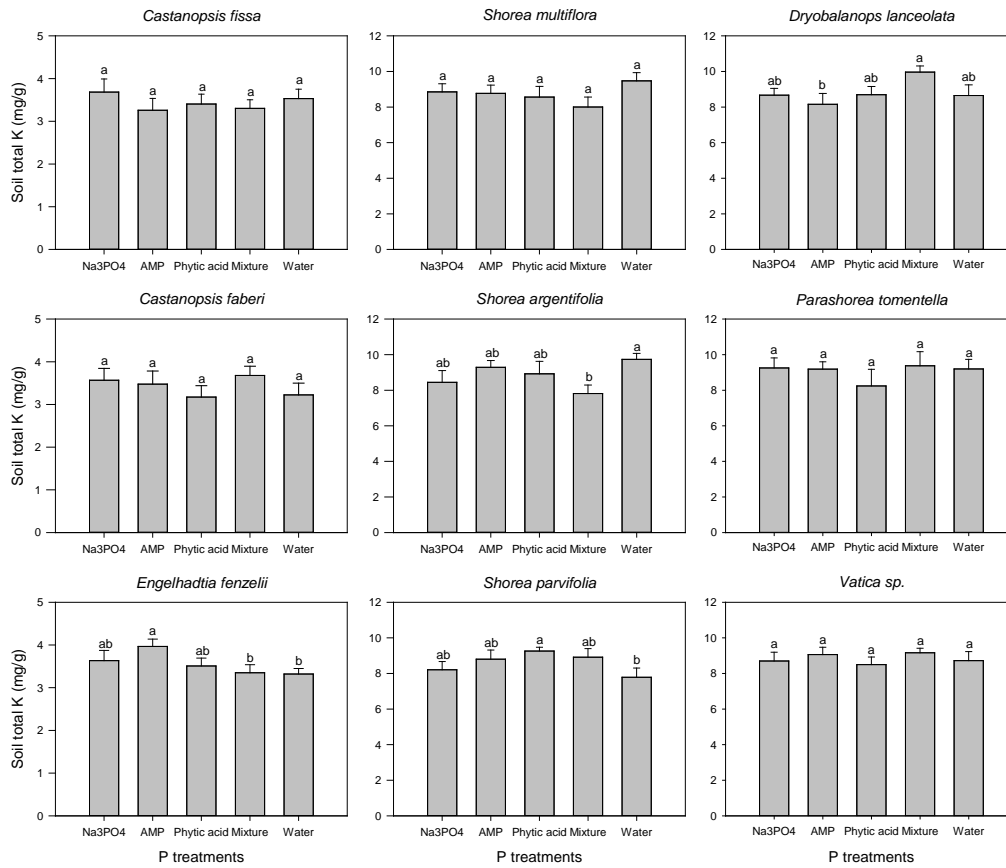
43 **Figure S3 (b)**



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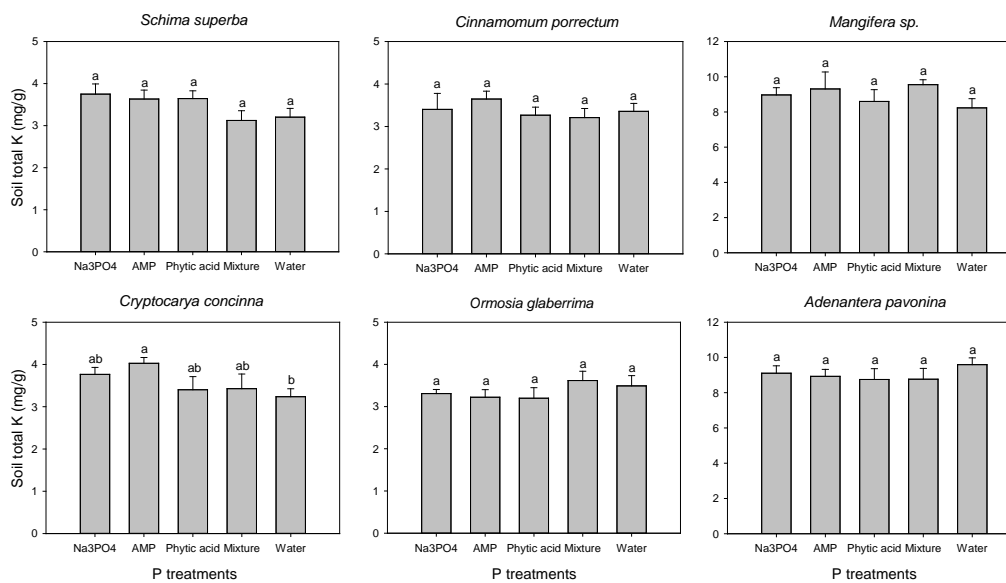
45 **Figure S4** Contents of soil total K in the P-treated soil of (a) ectomycorrhizal and (b) arbuscular
 46 mycorrhizal species at the end of the shade-house experiments. Bars are means with SE of each
 47 treatment for all 12 blocks.

48 **Figure S4 (a)**



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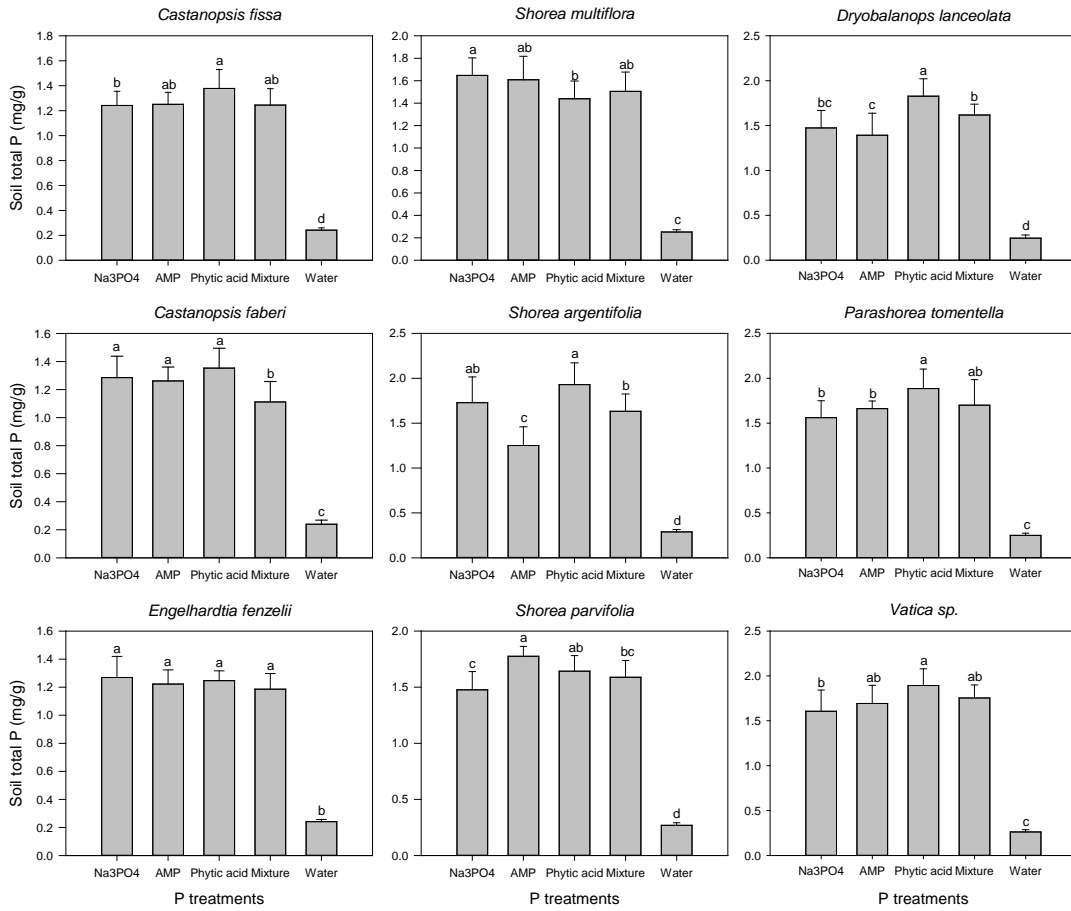
50 **Figure S4 (b)**



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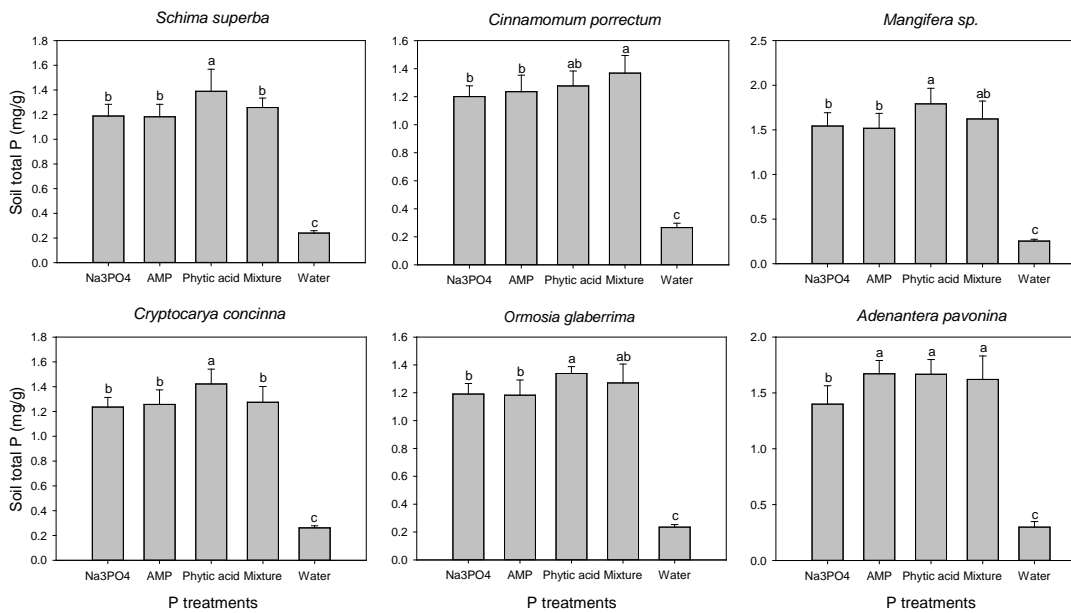
52 **Figure S5** Concentrations of soil total P in the P-treated soil of (a) ectomycorrhizal and (b)
 53 arbuscular mycorrhizal species at the end of the shade-house experiments.

54 **Figure S5 (a)**



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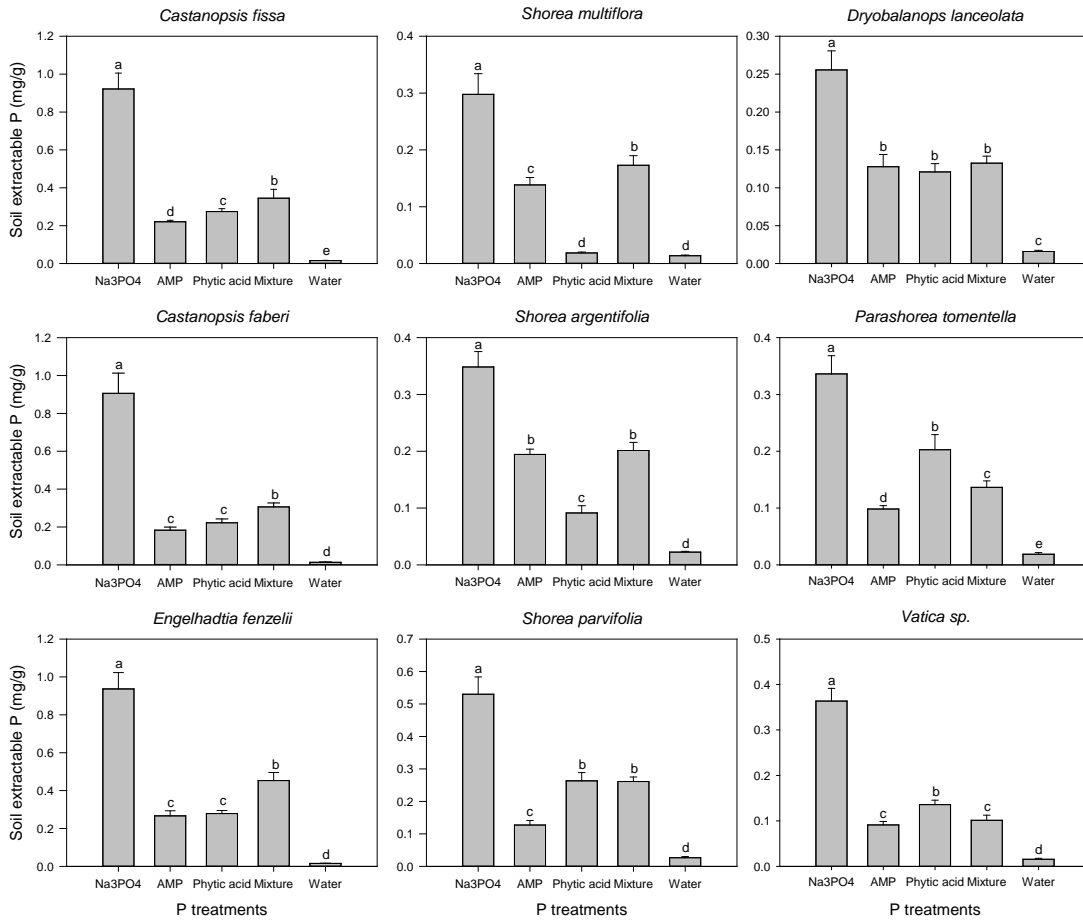
56 **Figure S5 (b)**



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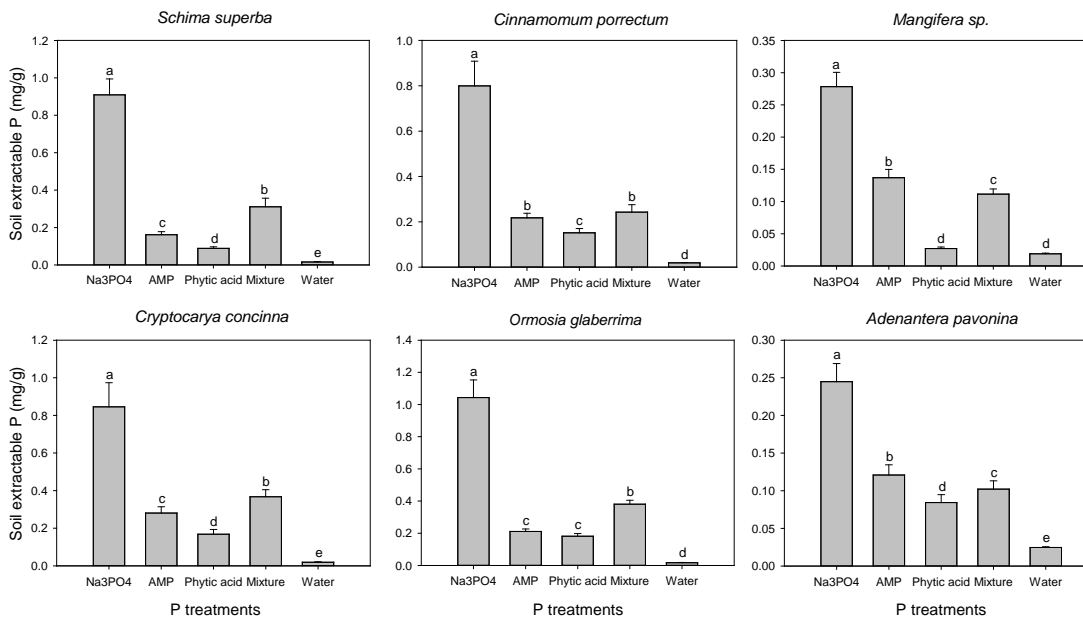
58 **Figure S6** Concentrations of soil available P in the P-treated soil of (a) ectomycorrhizal and
 59 (b) arbuscular mycorrhizal species at the end of the shade-house experiments.

60 **Figure S6 (a)**



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62 **Figure S6 (b)**



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