



Additional file 4. PHT1 phylogenetic tree. The out-groups were AtPHT2, AtPHT3, AtPHT4 and yeast PHO89 and *N. crassa* PHO4 (clear background). The PHT1 family in fungi is shown with a red background, the dicotyledonous and monocotyledonous subfamily II with a blue background, the AM-induced di- and mono-cotyledonous subfamily I with a yellow background, the monocotyledonous subfamily IV with a green background, and the dicotyledonous subfamily III with an orange background.