**Supporting Information**

**Fig. S1** Root dry mass (DM) of two *Lupinus albus* cultivars (Egyptian genotype P27734 and Australian cv. Kiev Mutant) at Y-axis grown at a soil pH of 5.1, 6.7 and 7.8 shown at X-axis. Bars are the means, and error bars are the standard errors of the means, derived from generalised least square models. (pH, *P* ≤ 0.0001). Different letters among cultivars indicate significant differences within each panel (*post hoc* Turkey test, *P*≤ 0.05).

**Fig. S2** Total leaf area of two *Lupinus albus* cultivars (Egyptian genotype P27734 and Australian cv. Kiev Mutant) shown at Y-axis grown at a soil pH of 5.1, 6.7 and 7.8 shown at X-axis. Bars are the means, and error bars are the standard errors of the means, derived from generalised least square models. No significant difference was found between pH treatments; Cultivar, and, Cultivar × pH interaction, P>0.05.

**Fig. S3** (a) Root surface area, (b) specific root length and (c) root mass fraction of *Lupinus albus* cultivars (Egyptian genotype P27734 versus Australian cv. Kiev Mutant) shown at Y-axis grown at soil pH 5.1, 6.7 and 7.8 shown at X-axis. Bars are the means, and error bars are the standard errors of the means, derived from generalised least square models. No significant difference was found between pH treatments; Cultivar; and, Cultivar × pH interaction, P>0.05.

**Fig. S4** Percentage of citrate, malate, fumarate and cis-aconitate detected by HPLC in the rhizosheath of the two cultivars of *Lupinus albus* (P27734 and Kiev Mutant) shown at Y-axis grown at soil pH 5.1, 6.7 and 8.3 shown at X-axis.

**Fig. S5**  pH of the rhizosheath **extracts** of **two** *Lupinus albus* cultivars (Egyptian genotype P27734 and Australian cv. Kiev Mutant) shown at Y-axis grown at soil pH 5.1, 6.7 and 8.3 shown X-axis. Bars are the means, and error bars are the standard errors of the means, derived from generalised least square models (n = 6).(pH, *P* ≤ 0.0001). Different letters among cultivars indicate significant differences within each panel (*post hoc* Turkey test, *P*≤ 0.05).

**Fig. S6** Concentrations of phosphorus (P) of two *Lupinus albus* cultivars (Egyptian genotype P27734 and Australian cv. Kiev Mutant) shown at Y-axis grown at soil pH 5.1, 6.7 and 8.3 shown at X-axis. Bars are the means, and error bars are the standard errors of the means, derived from generalised least square models. (a) Shoot (Cultivar × pH interaction, *P* ≤ 0.0001, (b) mature leaves (pH, *P* ≤ 0.0001). Different letters among groups indicate significant differences within each panel (*post hoc* Turkey test, *P*≤ 0.05).