<u>Supplementary Figures</u> Substratum influences uptake of radium-226 by plants Girault et al. The Science of the Total Environment

List of supplementary figures:

- Fig	1p.	2
- Fig	2р.	3
- Fig	3р.	4
- Fig	4p.	5
- Fig	5р.	6
- Fig	бр.	7
- Fig	7p.	8

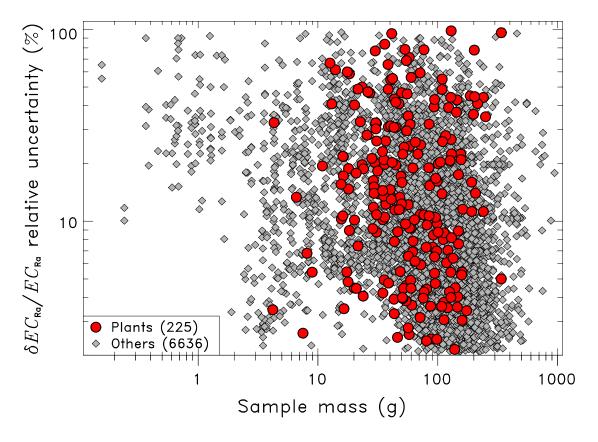


Fig. S1. Relative experimental uncertainty of EC_{Ra} (in %) as a function of the sample mass (in g) for our plant measurements. Our other measurements are plotted for comparison.

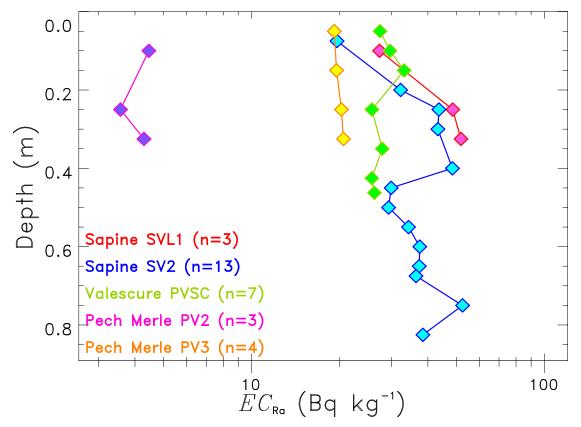


Fig. S2. Soil EC_{Ra} versus depth at the Sapine site (A subset) and at the Pech Merle site (B subset). One additional profile obtained in the Valescure watershed (Cévennes) near Anduze (A and B subsets) is also shown for comparison.

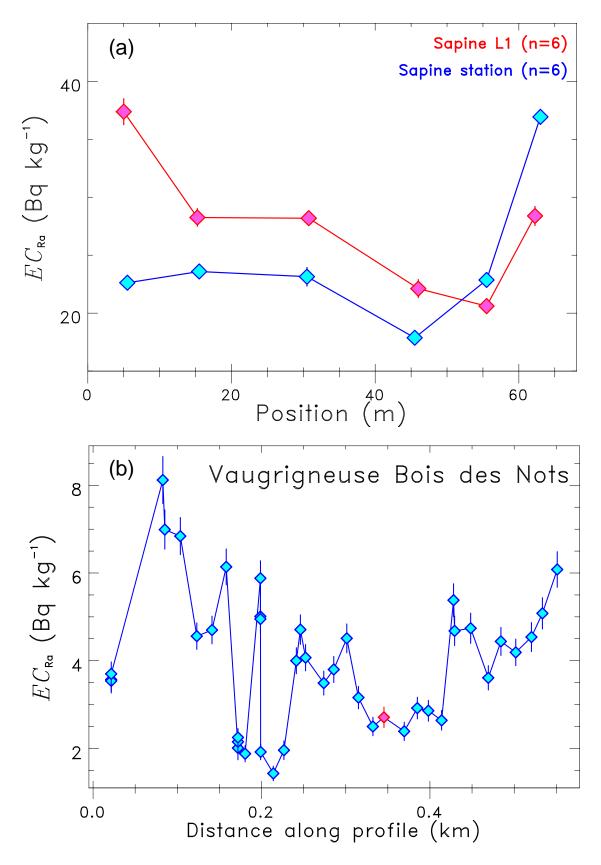


Fig. S3. Soil EC_{Ra} as a function of the position along surface profiles: (a) two 60-m-long profiles located at the Sapine site (A subset) and (b) one 600-m-long profile located at the Vaugrigneuse site (B subset). In (b), the soil sample close to a plant sample is shown in red.

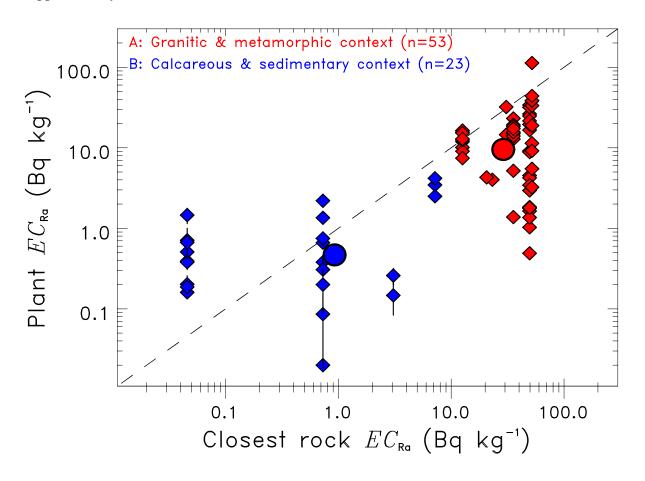


Fig. S4. Plant EC_{Ra} as a function of EC_{Ra} of the closest rock sample. Our whole data-set is plotted separately for plants growing in granitic and metamorphic context (A subset; in red) and in calcareous and sedimentary context (B subset; in blue). The closest rock corresponds to a nearby rock sample available at a distance of less than 500 m from the given plant sample. The data are represented as diamonds and the means as circles.

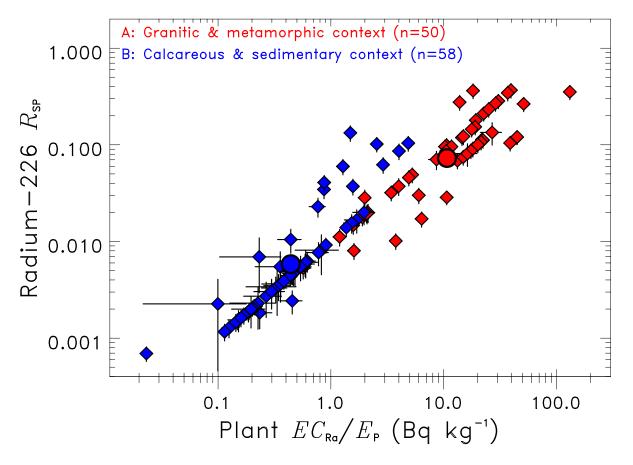


Fig. S5. ²²⁶Ra soil-to-plant transfer ratio (R_{SP}) as a function of the plant C_{Ra} . Our whole data-set is plotted separately for plants growing in granitic and metamorphic context (A subset; in red) and in calcareous and sedimentary context (B subset; in blue). The data are represented as diamonds and the means as circles.

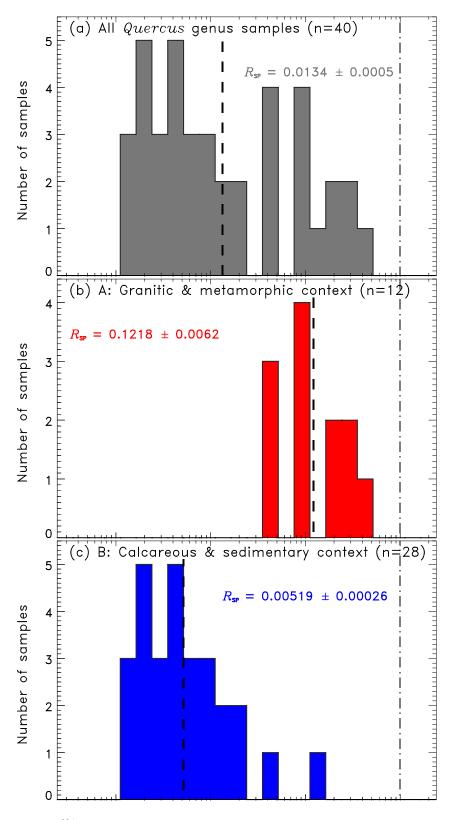


Fig. S6. Distributions of ²²⁶Ra soil-to-plant transfer ratio, R_{SP} , for (a) all our *Quercus* genus samples for which we have a nearby top soil sample (n = 40), (b) *Quercus* genus samples in the A subset (granitic and metamorphic context; n = 12), (c) *Quercus* genus samples in the B subset (calcareous and sedimentary context; n = 28). Geometric mean values are reported and shown as vertical dashed black lines.

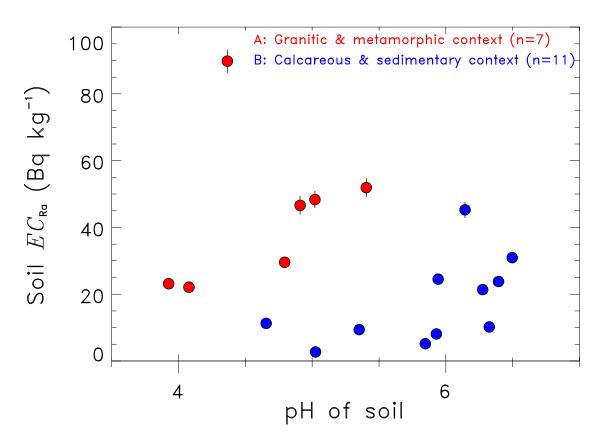


Fig. S7. Soil EC_{Ra} as a function of water pH of the soil. The data-set is plotted separately for soils overlying rocks in granitic and metamorphic context (A subset; in red) and in calcareous and sedimentary context (B subset; in blue).