

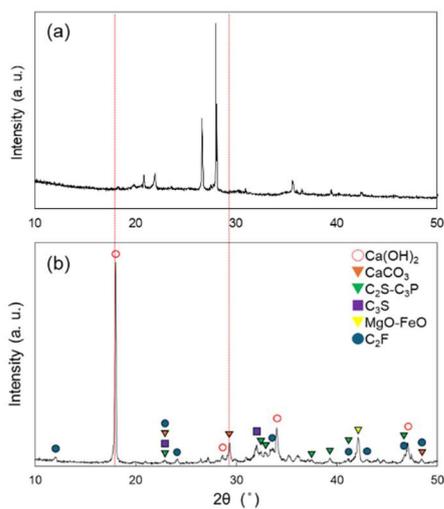
We have additional remarks and a revised figure in response to Comment #1.

Comment #1:

1: Have the authors considered quantifying the different mineral phases and amorphous phase of the slag fertilizer used? Utilizing e.g. the Rietveld method by addition of an internal standard mineral it is possible to quantitatively determine the concentrations of the identified mineral and amorphous phases. XRD analyses before and after the leaching process could provide insights into which mineral phases are dissolving and/or forming.

Answer:

Not only the  $\text{CaCO}_3$  phase but also the  $\text{Ca}(\text{OH})_2$  phase—which showed the highest relative intensity in the XRD pattern of the slag alone—was masked by soil-derived peaks in the mixed sample and could not be clearly identified. Based on these observations, we concluded that quantification of crystalline and amorphous phases is difficult under the conditions of this study.



Revised Fig. R1-1 XRD pattern of (a) soil–slag mixture and (b) slag (same with Fig. 1).