**S3 Table**. Results from linear combination fitting of P XANES.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample** | **Apatite** | **Adsorbed P** | **DCDP** | **Phytic acid** | **Al-P** | **sum** | **Dominant Sorption** | **Ca-P %** |
| AD 2% Fe | 0.374 | 0.155 |  | 0.499 |  | 1.028 | Org P/Ca-P | 37% |
| AD | 0.478 | 0.131 | 0.147 | 0.26 |  | 1.016 | Ca-P/Org P | 63% |
| AC 2%Fe |  | 0.446 | 0.28 |  | 0.28 | 1.006 | Ads P/Ca-P | 28% |
| AC | 0.718 | 0.221 | 0.107 |  |  | 1.046 | Ca-P | 83% |
| BN 2%Fe | 0.646 | 0.362 |  |  |  | 1.008 | Ca-P | 65% |
| BN | 0.817 | 0.134 |  |  |  | 0.951 | Ca-P | 82% |