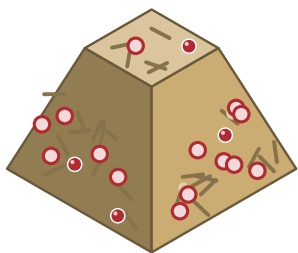


① Day 15

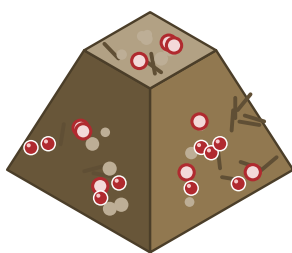
$$\Lambda = 1.0$$



4 of 18 extractable

② Day 45

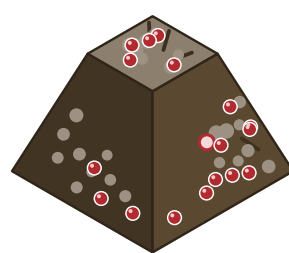
$$\Lambda = 2.1$$



9 of 18 extractable

③ Day 90

$$\Lambda = 3.8$$



17 of 18 extractable

humification $k = 0.0143 \text{ d}^{-1}$

matrix loss $\lambda = 0.0011 \text{ d}^{-1}$

$$C(t) = \frac{M f(t)}{m(t)}$$

M fixed

$f \uparrow \times 3.8$

$m \downarrow -8\%$

C rises fourfold with
no gain in metal content

● acid-extractable metal ○ occluded metal — lignocellulose ● humic matrix

