

The Impact of Metabolic Variance on C-14 Dating of Parchment and Papyrus.

The preceding consideration is clearly metabolic in nature and its impact on C-14 dating is largely an unexplored area. Known-age ancient manuscripts allow for such an exploration.

When we have established fixed parameters e.g. species to same species and generally same material to same material, then the results on Known-age material will be very accurately dated. As to this perhaps some insight may be offered from manuscripts of the same material but with different age.

So far we have seen where Parchment is well within the one-sigma range but Papyrus widely misses even the two-sigma range. The inconsistent two-sigma range forces us to use an alternate method. By doing so we are outside of isotope fractionation considerations. This means we do not convert sample C-14 content into that of wood. We use the Laboratory C-14 sample measurement and we refer to this as the uncorrected C-14 sample content. We must now use what we have and what we know. What we have is the uncorrected C-14 sample content and what we know is the historical age of the manuscript. We now fill in the blanks. When this is done the initial C-14 content of Papyrus is consistently about 2.4% higher than that of the standard. This standard is a manufactured sample with a given value of 1 and represents the C-14 content of the atmosphere.