The graph in Figure 13 captures the somewhat unexpected result that Jordan soils contained slightly more\(^{52}\) soil carbon than Cambodia soils. Although we estimated that Cambodia soils contained more soil organic matter than Jordan soils based on our loss on ignition results, the combustion of soils at high temperatures can also release ‘waters of hydration’—or crystalline water held tightly within clays, so tightly that it is not ‘baked off’ even at temperatures greater than 100\(\degree\)C.

A less surprising result is that while the soil carbon values are comparable, soil nitrogen values were not. This is illustrated in the comparison of carbon-to-nitrogen ratios (C:N), which shows that the Jordan C:N were much higher than the Cambodia C:N. In fact, nitrogen in Jordan soils averaged 0.17\%, about 36\% less than Cambodia soils (0.27\%).

![Soil carbon and C:N ratios comparison](image)

**Figure 13.** Soil carbon and carbon-to-nitrogen ratios of Cambodia and Jordan soils

Although it might be tempting to attribute differences in soil C:N to patterns of landmine aging, a closer inspection of the same landmines, determined in the field to either be likely to function or unlikely to function as intended, does not reveal any systematic pattern. As indicated in Table 4, both functional and non-functional PMN landmines had relatively high C:N, implying potential nitrogen limitation of soil decomposition processes. Conversely, all PMD6 landmines were deemed not functional and yet showed the greatest range in C:N.

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\(^{52}\) (although most likely not *significantly* more since 1 standard error of the mean [SE] is \(\sim 0.3\%\))