The vital stain fluorescein diacetate (FDA) was used to determine intra-specific variability of 10 UK orchid species, across six genera, as compared with in vitro, asymbiotic germination. For 23 seed lots tested, there was a linear relationship between germination and FDA viability, with a slope close to unity. In addition, the pattern of seed viability loss during artificial ageing at 60°C was monitored in one species, Dactylorhiza fuchsii and found to be similar, though not statistically identical, when measured by germination and FDA staining. The FDA test can thus provide a fast, dependable and accurate measure of intra-specific variation in seed viability for UK orchids.