Morphophysiological dormancy

Seeds with morphophysiological dormancy have an embryo that is less than one-third the size of the seed. It has not fully completed development when it is shed from the plant. In most cases, the seeds require a period of moist, warm stratification to allow the embryo to continue development. However, once the embryo completes development, it still has physiological dormancy that requires a period of moist, chilling stratification. In nature, seeds with morphophysiological dormancy can take several years to germinate because they need to be exposed to summer and winter conditions. To get quicker germination, these seeds can be placed moist in a warm place (about 21°C, 75°F) for several months before being moved to the refrigerator for several months more. Because of this complicated dormancy treatment, seeds with morphophysiological dormancy can be difficult to germinate for beginning gardeners.

White and green ash have underdeveloped embryos.