

Forensic Botany: Evidence and Analysis

REFERENCE: Coyle HM: Forensic botany: Evidence and analysis; *Forensic Sci Rev* 21:15; 2009.

ABSTRACT: Forensic botany is the use of plant evidence in matters of law. While plant fragments are often collected as trace evidence, they are only occasionally identified using microscopy and are still more rarely assessed using molecular biology techniques for individualization and sourcing of a sample. There are many different methods useful for DNA typing of plants; this review focuses on those techniques (DNA sequencing, STR, AFLP, RAPD) most relevant to the forensic science community and on those methods currently in practice. Plant evidence is commonly associated with homicides, with clandestine graves, as trace pollen on clothing, vehicles, or packaging, or in the transport of illicit drugs. DNA can be especially useful for the identification of minute quantity of samples, for differentiation of plants that lack distinguishing morphological features, and for generating a unique identifier for associative forensic evidence.

KEY WORDS: AFLP, DNA, forensic botany, STR, RAPD, seeds.
