Forensic botany encompasses many sub-disciplines, including plant anatomy, plant ecology, plant systematics, plant molecular biology, palynology, and limnology. Although the field of forensic botany has been recognized since the mid-1900's, the use of trace plant material as physical evidence in criminal casework is still novel. A review of published forensic casework that used plant evidence is presented here. Cases include the analysis of wood evidence in the Charles Lindbergh baby kidnapping, the use of pollen in establishing the location of a sexual assault, and pollen analysis to determine the time of year for burial in a mass grave. Additional cases discuss the use of plant growth rates to determine the time of a body deposit in a field, the use of diatoms to link individuals to a crime scene, and plant DNA typing to match seedpods to a tree under which a body was discovered. New DNA methods in development for plant species identification and individualization for forensic applications are also discussed. These DNA methods may be useful for linking an individual to a crime scene or physical evidence to a geographic location, or tracking marijuana distribution patterns.

Key words: botany; DNA, plant; criminology; gene probes, DNA; jurisprudence; kidnapping; laboratories, forensic; marijuana; narcotic control; plant structures