

Type of case	Application	Organism or material (additional information)	Reference	
Individualization/ kinship	Death/bodily/material harm	Bear (attack)	[36]	
		Dog (attack)	[37, 38]	
		Dog (traffic accident)	[39]	
		Bird (aircraft collision)	[40]	
	Identification	Horse (race doping control)	[41]	
		Kinship/Pedigree certification	Cattle (paternity)	[42]
	Horse (paternity)		[43]	
	Dog (paternity and pedigree)		[44-46]	
	Pigeon (paternity)		[47]	
	Taxonomic/species assignment	Wildlife/protected species	Smuggled eggs (identification)	[48]
Big cats (identification)			[49]	
Deer (identification)			[50]	
Tiger (poaching)			[51]	
Mouflon (poaching)			[52, 53]	
Bear (poaching)			[54]	
Coniferous trees (illegal logging)			[55]	
Palm (illegal trading)			[56]	
Identification of totally unknown species			Stomach contents (suicidal poisoning)	[8]
			Unknown animal (bite through a tent)	[57]
		Unknown livestock predators	[58, 59]	
Food and drug analyses		Dairy products (authentication)	[60-63]	
		Caviar (mislabeling)	[64, 65]	
		Meat products (detection)	[66, 67]	

		of species origin)	
		Meat (detection of religiously forbidden species)	[68]
		Fish and seafood products (detection of species origin)	[69, 70]
		Olive oils (authentication)	[71-73]
		Honey (authentication)	[74]
		Herbal teas (authentication)	[75, 76]
		Coffee (authentication)	[77]
		Drugs (legality and safety of traditional medicines)	[78, 79]
		Food traceability (food safety and identification of commercial fraud)	[80-85]
	Drug enforcement	Cannabis (identification)	[86, 87]
Population/breed/strain/variety assignment	Patent violation	Strawberry varieties (identification)	[88]
	Livestock robbery	Cattle rustling (identification)	[89]
		Cattle (illegal purchase of stolen animals)	[90]
	Fishing, competition and fraud	Salmon populations	[91]
		Commercial marine fish (false eco-certification)	[92]
		Koi carp (illegal fishing)	[93]
	Ivory source	Ivory (identification)	[94-96]
	Breeds identification	Horses	[43]
		Sheep	[97]
		Beef cattle	[98]
		Pigs	[99]
		Dogs	[100]
	Authenticity	Grapevine varieties	[101]

		Wine	[102]
Geographic assignment	Dust analysis	Fungi	[103]
	Identification of geographic variants	Blow fly	[104]
	Identification of geographic variants. Global biosecurity	Insects	[105]
Detection of genetically modified organisms (GMO)	GMO identification	Food products	[106]