

Table 4.

IN VIVO- Natural plant extracts that have been reported to exert a hypoglycemic or/and anti-hyperglycemic response *in vivo* due to the inhibition of pancreatic alpha- amylase.

Family name	Plant species	Extraction method	Animal model	Doses	Ref
Acanthaceae	<i>Andrographis paniculata</i> (Burm. f.) Nees	Ethanol Extract	Streptozotocin (STZ) induced diabetic rats	500 and 1000 mg/kg	(118)
Actinidiaceae	<i>Actinidia deliciosa</i>	90% Methanol Extract	Std:ddY mice	1000 mg/kg	(178)
Asparagaceae	<i>Polygonatum odoratum</i> (rhizome)	70% Ethanol Extract (total flavonoid fraction)	STZ- induced diabetic rats	100 and 200 mg/kg	(23)
Compositae	<i>Achillea santolina</i> L.	Aqueous Extract	Sprague- Dawley rats	125 mg/kg	(32)
Ebenaceae	<i>Diospyros kaki</i>	Water Extract (polyphenol concentrate powder)	Wistar rats	100 and 300 mg/kg	(145)
Fabaceae	<i>Vigna angularis</i>	40% Ethanol fraction of hot water extract	Wistar rats	500 mg/ kg	(152)
			Spontaneously diabetic KK-A ^y /Ta Jcl mice	5000 mg/kg	(194)
	<i>Phaseolus vulgaris</i>	Purified alpha- AI (1.5- 2.4 g alpha- AI/kg bean meal)	Wistar rats	50 mg/kg	(154)
			STZ- induced diabetic rats	100 mg/kg	(155)
Fabaceae	<i>Trigonella foenum- graecum</i> (Seed)	Petroleum ether Extract	Streptozotocin- induced diabetic rats	1500 mg/kg	(149)
		Formulation of omega-3 with fenugreek terpenes	Alloxan- induced diabetic rats	5% in food	(195)
Fagaceae	<i>Castanea sativa</i>	50% Aqueous acetonitrile Extract	Wistar rats	40-155 mg/kg	(43)

			GK/jcl rats	100- 300 mg/kg	
		75% Aqueous ethanol Extract	Wistar rats	100 mg/kg	(44)
			GK/Jcl db/db mice	300 mg/kg	
		60% Aqueous ethanol fraction (Sephadex LH- 20 column)	Wistar rats	25, 50, 100, 200 and 300 mg/kg	(183)
Geraniaceae	<i>Geranium graveolens</i> L.	Aqueous Extract	Sprague- Dawley rats	250 mg/kg	(31)
Lythraceae	<i>Punica granatum</i> (fruit)	Methanol Extract	Swiss albino mice and alloxan-induced diabetic mice	200 mg/kg	(196)
Oleaceae	<i>Olea europaea</i> L.	Leaves powder	GK/Jcl rats	20 mg/kg	(39)
Pineaceae	<i>Pinus maritima</i> (bark)	70% Ethanol Extract	Lep ^{ob} ob/ob mice	250 mg/kg	(170)
Pistaciaceae	<i>Pistacia atlantica</i> Desf.	Aqueous Extract	Sprague- Dawley rats	125 mg/kg	(32)
Polygonaceae	<i>Rheum ribes</i> L.	Aqueous Extract	Sprague- Dawley rats		
Rosaceae	<i>Sarcopoterium spinosum</i> (L.).	Aqueous Extract	Sprague- Dawley rats		
Rutaceae	<i>Citrus sinensis</i> (fruit)	Cold water Extract	Swiss albino mice and alloxan-induced diabetic mice	25 mg/kg	(196) (197)
Theaceae	<i>Camellia sinensis</i> (flower)	Hot water Extract (polysaccharide fraction)	Alloxan- induced diabetic mice	75, 150 and 300 mg/kg	(159)
Umbelliferae	<i>Eyngium creticum</i> Lam.	Aqueous Extract	Sprague- Dawley rats	500 mg/kg	(31)
Zigophyllaceae	<i>Balanites aegyptiaca</i> Del. (Fruits)	Petroleum ether Extract	Streptozotocin- induced diabetic rats	1500 mg/kg	(149)

