

3.0. REVIEW OF LITERATURE

Works concerned with the hepatoprotective activity

Phytotherapeutic property of terrestrial and aquatic plants have been recognised from ancient civilization but limited work has been carried out on the therapeutic potential of liver damage (3.1) particularly this is the first of its kind in the world on the therapeutic property of mangrove plants in CCl₄ induced liver damage. The complete available literature on the therapeutic properties of plants to cure liver damage is listed here under.

Year	Author(s)	Plant species studied	Aspect(s)
1983	<i>Chaturvedi et al.</i>	<i>Andrographis paniculata</i>	Clinical studies on kalmegh (<i>Andrographis paniculata</i>) in infective hepatitis
1991	Chandan <i>et al.</i>	<i>Boerhavia diffusa</i>	<i>Boerhavia diffusa</i> : A study of its hepatoprotective activity
1993	Murthy and Sreenevasan	<i>Tephrosia purpurea</i>	Hepatoprotective effect of <i>Tephrosia purpurea</i> in experimental animals.
1995	Anupam <i>et al.</i>	<i>Daucus carota</i>	Hepatoprotective activity of carrot (<i>Daucus carota</i> L.) against carbon tetrachloride intoxication in mouse liver
1995	Roseline <i>et al.</i>	<i>Cochlospermum planchonii</i>	The hepatoprotective cytochrome P-450 enzyme inhibitor isolated from the Nigerian medicinal plant <i>Cochlospermum planchonii</i> is a zinc salt

1995	Janbaz <i>et al.</i>	<i>Artemisia maritima</i>	Evaluation of the protective potential of <i>Artemisia maritima</i> extract on acetaminophen and CCl ₄ induced liver damage
1995	Sultana <i>et al.</i>	<i>Solanum nigrum</i> <i>Cichorium intybus</i>	Crude extracts of hepatoprotective plants, <i>Solanum nigrum</i> and <i>Cichorium intybus</i> inhibit free radical mediated DNA damage
1996	Chun-Chin <i>et al.</i>	<i>Ventilago leiocarpa</i>	Hepatoprotective effects of emodin from <i>Ventilago leiocarpa</i>
1997	Gebhardt and Fausel	<i>Cynara scolymus</i>	Antioxidant and hepatoprotective effects of artichoke extracts and constituents in cultured rat hepatocytes
1997	Yoshikawa <i>et al.</i>	<i>Bupleurum scorzonerifolium</i>	Scorzonerosides A, B, and C, novel triterpene oligoglycosides with hepatoprotective effect from Chinese bupleuri radix, the roots of <i>Bupleurum scorzonerifolium</i> Willd.
1997	Anand <i>et al.</i>	<i>Terminalia bellerica</i>	3, 4, 5-Trihydroxy benzoic acid (Gallic acid), the hepatoprotective principle in the fruits of <i>Terminalia bellerica</i> bioassay guided activity
1998	Aimin <i>et al.</i>	<i>Sedum sarmentosum</i>	Hepatoprotective triterpenes from <i>Sedum sarmentosum</i>
1998a	Matsuda <i>et al.</i>	<i>Betula platyphylla</i>	Hepatoprotective, superoxide scavenging and antioxidative activities of aromatic constituents from bark of <i>Betula platyphylla</i> Var. Japonica
1998b	Matsuda <i>et al.</i>	<i>Angelica furcijuga</i>	Hepatoprotective and nitric oxide production inhibitory activities of coumarin and polyacetylene constituents from the roots of <i>Angelica furcijuga</i>

1999	Sarkar <i>et al.</i>	<i>Trianthema portulacastrum</i>	Inhibition of early DNA-damage and chromosomal aberrations by <i>Trianthema portulacastrum</i> L. in carbon tetrachloride induced mouse liver damage
1999	Saraswat <i>et al.</i>	<i>Picrorhiza kurroa</i>	<i>Ex vivo</i> and <i>in vivo</i> investigations of picroliv from <i>Picrorhiza kurroa</i> in alcohol intoxication model in rats
1999	Jafri <i>et al.</i>	<i>Cassia occidentalis</i>	Hepatoprotective activity of leaves of <i>Cassia occidentalis</i> against paracetamol and ethyl alcohol intoxication in rats
1999	Bhakta <i>et al.</i>	<i>Cassia fistula</i>	Evaluation of hepatoprotective activity of <i>Cassia fistula</i> leaf extract
2000	Shakirali <i>et al.</i>	<i>Nardosta jatamansi</i>	<i>Nardosta jatamansi</i> protects against liver damage induced by thioacetamide in rats
2000	Wong <i>et al.</i>	<i>Myagropsis myagroides</i> <i>Sargassum henslowianum</i> <i>Sargassum siliquastrum</i>	Protective effects of seaweeds against liver injury caused by carbon tetrachloride in rats
2000	Kwa-Kyung <i>et al.</i>	<i>Mallotus japonicas</i>	Hepatoprotective effects of bergenin, a major constituent of <i>Mallotus japonicas</i> , on carbon tetrachloride intoxicated rats
2000	Jose and Kuttan	<i>Emblica officinalis</i>	Hepatoprotective activity of <i>Emblica officinalis</i> and chavanprash
2000	Jain <i>et al.</i>	<i>Andrographis paniculata</i>	LC analysis of hepatoprotective diterpenoids from <i>Andrographis paniculata</i>
2001	Ahmed and Khater	<i>Ambrosia maritima</i>	Evaluation of the protective potential of <i>Ambrosia maritima</i> extract on acetaminophen induced liver damage

2001	Bhakta <i>et al.</i>	<i>Cassia fistula</i>	Hepatoprotective activity of <i>Cassia fistula</i> leaf extract
2001	Wu <i>et al.</i>	<i>Phaseolus radiates</i> <i>Phaseolus aureus</i>	Evaluation of hepatoprotective activity of legumes
2001*	Babu <i>et al.</i>	<i>Acanthus ilicifolius</i>	Antioxidant and hepatoprotective effect of <i>Acanthus ilicifolius</i>
2001	Ahmed <i>et al.</i>	<i>Luffa echinata</i>	Hepatoprotective activity of <i>Luffa echinata</i> fruits
2001	Sunitha <i>et al.</i>	<i>Crataeva nurvala</i>	Hepatoprotective effect of lupeol and lupeol linoleate on tissue antioxidant defence system in cadmium induced hepatotoxicity in rats
2001	Kyung <i>et al.</i>	<i>Platycodon grandiflorum</i>	Hepatoprotective effects of <i>Platycodon grandiflorum</i> on acetaminophen induced liver damage
2001	Matsuda <i>et al.</i>	<i>Zedoarirae rhizome</i>	Hepatoprotective constituents from <i>Zedoarirae rhizome</i> absolute stereo structures of three new carabrane type sesquiterpenes, curcumenolactones A, B, and C
2002	Venukumar and Latha	<i>Curculigo orchioides</i>	Antioxidant activity of <i>Curculigo orchioides</i> in carbon tetrachloride induced hepatopathy in rats
2002	Ahmed <i>et al.</i>	<i>Apium graveolens</i> <i>Croton oblongifolius</i>	Hepatoprotective activity of two plants belonging to the Apiaceae and the Euphorbiaceae family
2002	Kadarian <i>et al.</i>	<i>Achyrocline satureioides</i>	Hepatoprotective activity of <i>Achyrocline satureioides</i> (LAM) D. C.

2002	Barbisan <i>et al.</i>	<i>Agaricus blazei</i>	Influence of aqueous extract of <i>Agaricus blazei</i> on rat liver toxicity induced by different doses of diethylnitrosamine
2002	Yanpallewar <i>et al.</i>	<i>Azadirachta indica</i>	Effect of <i>Azadirachta indica</i> on paracetamol induced hepatic damage in albino rats
2002	Barth <i>et al.</i>	<i>Citrullus colocynthis</i>	<i>In vitro</i> investigation of a standardized dried extract of <i>Citrullus colocynthis</i> on liver toxicity in adult rats
2002	Mahmoud <i>et al.</i>	<i>Schistosoma mansoni</i>	The effect of <i>Schistosoma mansoni</i> infection in mice
2002	Ajith and Janardhanan	<i>Phellinus rimosus</i>	Antioxidant and antihepatotoxic activities of <i>Phellinus rimosus</i> (Berk) pilat
2002	Janat and Al-Merie	<i>Pistacia lentiscus</i> <i>Phillyrea latifolia</i> <i>Nicotiana glauca</i>	Evaluation of hepatoprotective effect of <i>Pistacia lentiscus</i> , <i>Phillyrea latifolia</i> and <i>Nicotiana glauca</i>
2002	Matsuda <i>et al.</i>	<i>Tilia argentea</i>	Hepatoprotective principles from the flowers of <i>Tilia argentea</i> (Linden): structure requirements of tiliroside and mechanism of action
2002	Zhang <i>et al.</i>	<i>Ganoderma lucidum</i>	Hepatoprotective role of <i>Ganoderma lucidum</i> polysaccharide against BCG induced immune liver injury in mice
2002	Sethuraman <i>et al.</i>	<i>Sarcostemma brevistigma</i>	Hepatoprotective activity of <i>Sarcostemma brevistigma</i> against carbon tetrachloride induced hepatic damage in rats

2003	Chattopadhyay	<i>Azadirachta indica</i>	Possible mechanism of hepatoprotective activity of <i>Azadirachta indica</i> leaf extract: part II
2003	Orhan <i>et al.</i>	<i>Gentiana olivieri</i>	Evaluation of hepatoprotective effect of <i>Gentiana olivieri</i> herbs on sub acute administration and isolation active principles
2003	Yadav and Dixit	<i>Kalanchoe pinnata</i>	Hepatoprotective activity of leaves <i>Kalanchoe pinnata</i> Pers
2003	Chin <i>et al.</i>	<i>Lycium chinense</i>	Hepatoprotective pyrrole derivatives of <i>Lycium chinense</i> fruits
2003	Sohn <i>et al.</i>	<i>Nelumbo nucifera</i>	Hepatoprotective and free radical scavenging effects of <i>Nelumbo nucifera</i>
2003	Al-Qarawi <i>et al.</i>	<i>Adansonia digitata</i>	Hepatoprotective influence of <i>Adansonia digitata</i> pulp
2003	Bhattacharyya <i>et al.</i>	<i>Picorrhiza kurroa</i> <i>Boerrhavia diffuse</i> <i>Tinospora</i> <i>Cordifolia</i> <i>Andrographis paniculata</i> <i>Phyllanthus emblica</i>	Hepatoprotective effect of HIMOLIV, a polyherbal formulation in rats
2003	Jang et al.	<i>Scutellaria radix</i>	Hepatoprotective effect of baicalin, a major flavone from <i>Scutellaria radix</i> , on acetaminophen-induced liver injury in mice
2004	Nan <i>et al.</i>	<i>Acanthopanax koreanum</i>	Effect of <i>Acanthopanax koreanum</i> (Araliaceae) on D-galactosamine and lipopolysaccharide induced fulminant hepatitis

2004	Lee <i>et al.</i>	<i>Buddleia officinalis</i>	Protective effect of acetoside on carbon tetrachloride induced hepatotoxicity
2004	Bhattacharyya <i>et al.</i>	<i>Adhatoda vasica</i>	Hepatoprotective activity of <i>Adhatoda vasica</i> aqueous leaf extract on D-galactosamine induced liver damage in rats
2004	Achliya <i>et al.</i>	<i>Emblica officinalis</i> <i>Glycyrrhiza glabra</i>	Evaluation of hepatoprotective effect of amalkadi ghrita against carbon tetrachloride induced hepatic damage in rats
2004	Kuzmanova <i>et al.</i>	<i>Aronia melanocarpa</i>	Hepatoprotective effect of the natural fruit juice from <i>Aronia melanocarpa</i> on carbon tetrachloride induced acute liver damage in rats
2004	Wang <i>et al.</i>	<i>Bupleurum kaoi</i>	Hepatoprotective and antioxidant effects of <i>Bupleurum kaoi</i> Liu (Chao et Chaung) extract and its fractions fractionated using supercritical CO ₂ on CCl ₄ induced liver damage
2004	Oh <i>et al.</i>	<i>Equisetum arvense</i>	Hepatoprotective and free radical scavenging activities of phenolic petrosins and flavonoids isolated from <i>Equisetum arvense</i>
2004	Suja <i>et al.</i>	<i>Helminthostachys zeylanica</i>	Evaluation of hepatoprotective effects of <i>Helminthostachys zeylanica</i> (L.) Hook. against carbon tetrachloride induced liver damage in Wistar rats
2004	Valentao <i>et al.</i>	<i>Hypericum androsaemum</i>	Protective activity of <i>Hypericum androsaemum</i> infusion against tert-butyl hydroperoxide-induced oxidative damage in isolated rat hepatocytes

2004	Rajesh and Latha	<i>Berberis aristata</i> <i>Cordia myxa</i> <i>Curculigo orchioides</i> <i>Elettaria cardamomum</i> <i>Glycyrrhiza glabra</i> <i>Piper longum</i> <i>Thespesia populnea</i> <i>Zingiber officinale</i>	Preliminary evaluation of the antihepatotoxic activity of Kamilari, a polyherbal formulation
2004	Ha <i>et al.</i>	<i>Lycium chinense</i>	Protective effect of <i>Lycium chinense</i> fruit on carbon tetrachloride induced hepatotoxicity
2004	Bhandarkar and Khan	<i>Nymphaea stellata</i>	Antihepatotoxic effect of <i>Nymphaea stellata</i> Willd. against carbon tetrachloride induced hepatic damage in albino rats
2004	Asha <i>et al.</i>	<i>Phyllanthus maderaspatensis</i>	Further studies on the antihepatotoxic activity of <i>Phyllanthus maderaspatensis</i> Linn.
2004	Pandima Devi <i>et al.</i>	<i>Premna tomentosa</i>	Protective effect of <i>Premna tomentosa</i> (L. Verbenaceae) extract on membrane bound phosphatases and inorganic cations transport in acetaminophen induced hepatotoxicity rats
2004	Kumar <i>et al.</i>	<i>Trianthema portulacastrum</i>	Hepatoprotective activity of <i>Trianthema portulacastrum</i> L. against paracetamol and thioacetamide intoxication in albino rats

2004	Germano <i>et al.</i>	<i>Trichilia emetic</i>	Hepatoprotective and antibacterial effects of extracts from <i>Trichilia emetica</i> Vahl. (Meliaceae)
2004*	Uddin <i>et al.</i>	<i>Xylocarpus granatum</i>	Free radical scavenging activity of some Bangladeshi plant extracts
2005	Amin and Hamza	<i>Hibiscus sabdariffa</i> <i>Rosmarinus officinalis</i> <i>Salvia officinalis</i>	Hepatoprotective effects of <i>Hibiscus</i> , <i>Rosmarinus</i> and <i>Salvia</i> on azathioprine induced toxicity in rats
2005	Porchezian and Ansari	<i>Abutilon indicum</i>	Hepatoprotective activity of <i>Abutilon indicum</i> on experimental liver damage in rats
2005	Bhattacharyya <i>et al.</i>	<i>Adhatoda vasica</i>	Hepatoprotective activity of <i>Adhatoda vasica</i> aqueous leaf extract on D-galactosamine induced liver damage in rats
2005	Torres-Duran <i>et al.</i>	<i>Arthrospira maxima</i>	Protective effect of <i>Arthrospira maxima</i> on fatty acid composition in fatty liver
2005	Jamshidzadeh <i>et al.</i>	<i>Gundelia tourenfortii</i>	Hepatoprotective activity of <i>Gundelia tourenfortii</i>
2005	Jin <i>et al.</i>	<i>Morus bombycis</i>	Hepatoprotective and antioxidant effects of <i>Morus bombycis</i> Koidzumi on CCl ₄ induced liver damage
2005	Ravikumar <i>et al.</i>	<i>Tridax procumbens</i>	Hepatoprotective activity of <i>Tridax procumbens</i> against D-galactosamine/lipopolysaccharide induced hepatitis in rats
2005	Sampedro <i>et al.</i>	<i>Silybum marianum</i>	Yeast extract and methyl jasmonate induced silymarin production in cell cultures of <i>Silybum marianum</i> (L.) Gaertn

2005	Najmi <i>et al.</i>	<i>Cichorium intybus</i> <i>Tamarix dioica</i> <i>Solanum nigrum</i> <i>Rheum emodi</i> <i>Rubia cordifolia</i> <i>Vitex negundo</i> <i>Cassia occidentalis</i> <i>Foeniculum vulgare</i> <i>Cuscuta reflexa</i> <i>Careya arborea</i> <i>Phyllanthus niruri</i> <i>Plantago major</i> <i>Rosa damascene</i> <i>Solanum xanthocarpum</i>	Free radical scavenging and hepatoprotective activity of jigrine against galactosamine induced hepatopathy in rats
2005	Pramyothin <i>et al.</i>	<i>Thunbergia laurifolia</i>	Hepatoprotective activity of <i>Thunbergia laurifolia</i> Linn extract in rats treated with ethanol: <i>In vitro</i> and <i>in vivo</i> studies
2005	Germano <i>et al.</i>	<i>Trichilia emetica</i>	Hepatoprotective and antibacterial effects of extracts from <i>Trichilia emetica</i> Vahl. (Meliaceae)
2005	Mohamed <i>et al.</i>	<i>Viburnum tinus</i>	Phytochemical constituents and hepatoprotective activity of <i>Viburnum tinus</i>

2005	Roy <i>et al.</i>	<i>Psidium guajava</i>	Heatoprotective activity of <i>Psidium guajava</i> Linn. leaf extract.
2005	Bhar <i>et al.</i>	<i>Aphanamixis polystachia</i> <i>Phyllanthus niruri</i> <i>Eclipta alba</i> <i>Andrographis paniculata</i> <i>Picrorhiza kurroa</i> <i>Tinospora cordifolia</i> <i>Naregamia alata</i> <i>Emblica officinalis</i>	Hepatoprotective effect of Envil on paracetamol induced damage in broiler chicks
2006	Awadd <i>et al.</i>	<i>Schouwia thebica</i>	Hepatoprotective activity of <i>Schouwia thebica</i> webb
2006	Kaviarasan <i>et al.</i>	<i>Trigonella foenum graecum</i>	Fenugreek (<i>Trigonella foenum graecum</i>) seed extract prevents ethanol induced toxicity and apoptosis in chang liver cells
2006	Kil- Nam <i>et al.</i>	<i>Ecklonia cava</i>	Protective effect of <i>Ecklonia cava</i> enzymatic extracts on hydrogen peroxide induced cell damage
2006	Betul <i>et al.</i>	<i>Ononis spinosa</i>	Analgesic and hepatotoxic effects <i>Ononis spinosa</i> L.
2006	Yihang <i>et al.</i>	<i>Laggera alata</i>	Hepatoprotective effect of total flavonoids from <i>Laggera alata</i> against carbon tetra chloride induced injury in primary cultured neonatal rat hepatocytes and in rats with hepatic damage

2006	Antony <i>et al.</i>	<i>Centella asiatica</i>	Hepatoprotective effect of <i>Centella asiatica</i> (L) in carbon tetrachloride induced liver injury in rats
2006	Sheikh <i>et al.</i>	<i>Achillea millefolium</i>	Studies on hepatoprotective, antispasmodic and calcium antagonistic activities of the aqueous methanol extract of <i>Achillea millefolium</i>
2006	Hanefi <i>et al.</i>	<i>Foeniculum vulgare</i>	Investigation of hepatoprotective effect of <i>Foeniculum vulgare</i> fixed oil in rats
2006	Sureshkumar <i>et al.</i>	<i>Pergularia daemia</i>	Hepatoprotective effect of extracts from <i>Pergularia daemia</i> Forsk.
2006	Mishra <i>et al.</i>	<i>Garcinia indica</i>	Antioxidant activity of <i>Garcinia indica</i> (Kokam) and its syrup
2006	Kasturi <i>et al.</i>	<i>Cajanus indicus</i>	Purification and characterisation of 43kD hepatoprotective protein from the herb <i>Cajanus indicus</i> L.
2006	Vidyalakshmi <i>et al.</i>	<i>Mussaenda glabra</i>	Free radical scavenging activity of <i>Mussaenda glabra</i>
2006	Manjunatha	<i>Pterocarpus santalinus</i>	Hepatoprotective activity of <i>Pterocarpus santalinus</i> an endangered medicinal plant
2006	Rao and Rao	<i>Rubia cordifolia</i>	Hepatoprotective effects of rubiadin, a major constituent of <i>Rubia cordifolia</i> Linn.
2006	Lin <i>et al.</i>	<i>Salvia miltiorrhiza</i>	In vitro protective effects of salvianolic acid B on primary hepatocytes and hepatic stellate cells
2006	Tang <i>et al.</i>	<i>Terminalia catappa</i>	Effective protection of <i>Terminalia catappa</i> L. leaves from damage induced by carbon tetrachloride in liver mitochondria

2006	Afaf <i>et al.</i>	<i>Curcuma longa</i>	Biochemical studies on the hepatoprotective effect of <i>Curcuma longa</i> on some glycolytic enzymes in mice
2006	Gupta <i>et al.</i>	<i>Rauwolfia serpentina</i>	Hepatoprotective activity of <i>Rauwolfia serpentina</i> rhizome in paracetamol intoxicated rats
2006	Ajay <i>et al.</i>	<i>Chamomile capitula</i>	Hepatoprotective activity of aqueous and ethanolic extract of <i>Chamomile capitula</i> in paracetamol intoxicated albino rats
2006	Jyothi <i>et al.</i>	<i>Boswellia serrata</i>	Effect of hexane extract of <i>Boswellia serrata</i> oleogum resin on chemically induced liver damage
2006*	Vijayavel <i>et al.</i>	<i>Rhizophora apiculata</i>	Free radical scavenging activity of the marine mangrove <i>Rhizophora apiculata</i> bark extract with Reference to naphthalene induced mitochondrial dysfunction
2007	Didem <i>et al.</i>	<i>Vitis vinifera</i>	Hepatoprotective effect of <i>Vitis vinifera</i> L. leaves on carbon tetrachloride induced acute liver damage in rats
2007	Sureshkumar and Mishra	<i>Pergularia daemia</i>	Hepatoprotective activity of extracts from <i>Pergularia daemia</i> Forsk. against carbon tetrachloride induced toxicity in rats
2007	Garba <i>et al.</i>	<i>Ficus sycomorus</i>	Hepatoprotective effect of the aqueous root bark extract of <i>Ficus sycomorus</i> (Linn) on carbon tetrachloride induced hepatotoxicity in rats
2007	Lee <i>et al.</i>	<i>Camellia oleifera</i>	Heaptoprotection of tea seed oil (<i>Camellia oleifera</i> Abel.) against CCl ₄ induced oxidative damage in rats

2007	Naaz <i>et al.</i>	<i>Phyllanthus amarus</i>	Hepatoprotective effect of ethanolic extract of <i>Phyllanthus amarus</i> Schum. et Thonn. on aflatoxin B ₁ induced liver damage in mice
2007	Yen <i>et al.</i>	<i>Cuscuta chinensis</i>	Hepatoprotective and antioxidant effects of <i>Cuscuta chinensis</i> against acetaminophen induced hepatotoxicity in rats
2007	Lee <i>et al.</i>	<i>Artemisia capillaries</i> <i>Gardenia jasminoides</i> <i>Rheum officinale</i>	Herb medicine Yin-Chin-Hao-Tang ameliorates hepatic fibrosis in bile duct ligation rats
2007	Ki <i>et al.</i>	<i>Lactuca indica</i>	Isolation of quinic acid derivatives and flavonoids from the aerial parts of <i>Lactuca indica</i> L. and their hepatoprotective activity <i>in vitro</i>
2007	Ajith <i>et al.</i>	<i>Zingiber officinale</i>	<i>Zingiber officinale</i> Roscoe. prevents acetaminophen induced acute hepatotoxicity by enhancing hepatic antioxidant status
2007	Kannampalli <i>et al.</i>	<i>Cassia fistula</i>	Effect of <i>Cassia fistula</i> Linn. leaf extract on diethylnitrosamine induced hepatic injury in rats
2007	Pramyothin <i>et al.</i>	<i>Phyllanthus amarus</i>	Hepatoprotective activity of <i>Phyllanthus amarus</i> Schum. et Thonn. extract in ethanol treated rats: <i>In vitro</i> and <i>in vivo</i> studies
2007	Krishnamohan <i>et al.</i>	<i>Ficus carica</i>	Hepatoprotective activity of <i>Ficus carica</i> Linn. leaf extract against carbon tetrachloride induced hepatotoxicity in rats

2007	Chandan <i>et al.</i>	<i>Aloe barbadensis</i>	Hepatoprotective potential of <i>Aloe barbadensis</i> Mill. against carbon tetrachloride induced hepatotoxicity
2007	Panovska <i>et al.</i>	<i>Teucrium polium</i>	Hepatoprotective effect of the ethyl acetate extract of <i>Teucrium polium</i> L. against carbon tetrachloride induced hepatic injury in rats
2007	Ramachandra Setty <i>et al.</i>	<i>Calotropis procera</i>	Hepatoprotective activity of <i>Calotropis procera</i> flowers against paracetamol induced hepatic injury in rats
2007	Lone <i>et al.</i>	<i>Rumex patientia</i>	Protective effect of <i>Rumex patientia</i> (English spinach) roots on ferric nitrilotriacetate (Fe-NTA) induced hepatic oxidative stress and tumour promotion response
2007	Asha <i>et al.</i>	<i>Phyllanthus maderaspatensis</i>	Heaptoprotection of <i>Phyllanthus maderaspatensis</i> against experimentally induced liver injury in rats
2007	Padhy <i>et al.</i>	<i>Calotropis procera</i>	<i>Calotropis procera</i> latex affords protection against carbon tetrachloride induced hepatotoxicity in rats
2007	Yihang <i>et al.</i>	<i>Laggera pterodonta</i>	Hepatoprotective and ant oxidative effects of total phenolics from <i>Laggera pterodonta</i> on chemical induced injury in primary cultured neonatal rat hepatocytes
2007	Chandrasekar <i>et al.</i>	<i>Leucas lavandulaefolia</i>	Hepatoprotective activity of the <i>Leucas lavandulaefolia</i> on D(+) galactosamine induced hepatic injury in rats
2007	Raja <i>et al.</i>	<i>Cytisus scoparius</i>	Antioxidant effect of <i>Cytisus scoparius</i> against carbon tetrachloride treated liver injury in rats

2007	Micheline <i>et al.</i>	<i>Fucus vesiculosus</i> <i>Gigartina acicularis</i> <i>Gigartina pisillata</i> <i>Eucheuma cottonii</i> <i>Eucheuma spinosa</i>	Antioxidant activities of sulphated polysaccharides from brown and red sea weeds
2007	Usha <i>et al.</i>	<i>Hygrophila spinosa</i> <i>Cassia occidentalis</i>	Hepatoprotective effect of <i>Hygrophila spinosa</i> and <i>Cassia occidentalis</i> on carbon tetrachloride induced liver damage in experimental rats
2007	Shakir <i>et al.</i>	<i>Linum usitatissimum</i>	Hypocholesterolemic and hepatoprotective effects of flax seed chutney: evidence from animal studies
2007	Saravanan and Nalini	<i>Hemidesmus mindicus</i>	<i>Hemidesmus mindicus</i> protects against ethanol induced liver toxicity
2007	Mary and Sil	<i>Phyllanthus niruri</i>	Protective role of <i>Phyllanthus niruri</i> against nimesulide induced hepatic damage
2007	Renteria <i>et al.</i>	<i>Leucophyllum frutescens</i>	Hepatoprotective effect of <i>Leucophyllum frutescens</i> on Wistar albino rats intoxicated with carbon tetrachloride
2007	Vinodhini <i>et al.</i>	<i>Aegle marmelos</i>	The hepatoprotective effect of <i>Bael</i> leaves (<i>Aegle marmelos</i>) in alcohol induced liver injury in albino rats
2007	Palanisamy <i>et al.</i>	<i>Pterocarpus santalinus</i>	Protective and therapeutic effects of the Indian medicinal plant <i>Pterocarpus santalinus</i> on D-galactosamine induced liver damage

2007	Ghosh <i>et al.</i>	<i>Bacopa monniera</i>	Hepatoprotective activity of <i>Bacopa monnieri</i> L. against ethanol induced hepatotoxicity in rats
2007*	Dong-Li Li <i>et al.</i>	<i>Rhizophora stylosa</i>	Flavanol derivatives from <i>Rhizophora stylosa</i> and their DPPH radical scavenging activity
2008	Chin-Yuan	<i>Pyrrosia petiolosa</i>	Antioxidant activity of <i>Pyrrosia petiolosa</i>
2008	Manokaran <i>et al.</i>	<i>Aerva lanata</i>	Hepatoprotective activity of <i>Aerva lanata</i> against paracetamol induced hepatotoxicity in rats
2008	Senthilumar <i>et al.</i>	<i>Careya arborea</i>	Antioxidant and hepatoprotective activity of the methanol extract of <i>Careya arborea</i> in ehrlich ascites carcinoma bearing mice
2008	Channabasavaraj <i>et al.</i>	<i>Ficus glomerata</i>	Hepatoprotective and antioxidant activity of methanol extract of <i>Ficus glomerata</i>
2008	Deshmukh <i>et al.</i>	<i>Calotropis gigantea</i>	Hepatoprotective activity of <i>Calotropis gigantea</i> root bark experimental liver damage induced by D-galactosamine in rats
2008	Shilova <i>et al.</i>	<i>Filipendula ulmaria</i>	Hepatoprotective properties of fractions from meadowsweet extract during experimental toxic hepatitis
2008	Maheswari <i>et al.</i>	<i>Orthosiphon stamineus</i>	Hepatoprotective activity of <i>Orthosiphon stamineus</i> on liver damage caused by paracetamol in rats
2008	Samudram <i>et al.</i>	<i>Eclipta alba</i> <i>Piper longum</i>	Hepatoprotective activity of Bi - herbal ethanolic extract on CCl ₄ induced hepatic damage in rats
2008	Manokaran <i>et al.</i>	<i>Aerva lanata</i>	Hepatoprotective activity of <i>Aerva lanata</i> Linn. against paracetamol induced hepatotoxicity in rats

2008	Afaf <i>et al.</i>	<i>Lepidium sativum</i>	Hepatoprotective effect of <i>Lepidium sativum</i> against carbon tetrachloride induced damage in rats
2008	Chang-Chi <i>et al.</i>	<i>Solanum nigrum</i>	Inhibitory effect of <i>Solanum nigrum</i> on thioacetamide induced liver fibrosis in mice
2008	Hui-Mei <i>et al.</i>	<i>Solanum nigrum</i>	Hepatoprotective effects of <i>Solanum nigrum</i> Linn. extract against CCl ₄ induced oxidative damage in rats
2008	Madani <i>et al.</i>	<i>Silybum carica</i> <i>Cichorium intybus</i>	Hepatoprotective activity of <i>Silybum carica</i> and <i>Cichorium intybus</i> against thioacetamide in rat
2008	Meena <i>et al.</i>	<i>Sargassum polycystum</i>	Antihepatotoxic potential of <i>Sargassum polycystum</i> (Phaeophyceae) on antioxidant defence status in D-galactosamine induced hepatitis in rats
2008	Murugaian <i>et al.</i>	<i>Wedelia calendulacea</i>	Hepatoprotective activity of <i>Wedelia calendulacea</i> L. against acute hepatotoxicity in rats
2008	Saleem <i>et al.</i>	<i>Annona squamosa</i>	Hepatoprotective activity of <i>Annona squamosa</i> (Linn) on experimental animal model.
2008	Vadivu <i>et al.</i>	<i>Coccinia grandis</i>	Evaluation of hepatoprotective activity of the fruits of <i>Coccinia grandis</i> Linn
2008*	Banerjee <i>et al.</i>	<i>Bruguiera gymnorrhiza</i> , <i>Rhizophora mucronata</i> <i>Avicennia alba</i> <i>Ceriops decandra</i> <i>Aegiceras corniculatum</i> <i>Acanthus ilicifolius</i>	Antioxidant activity and total phenolics of some mangroves in Sundarbans.

2008*	Agoramoorthy <i>et al.</i>	<i>Bruguiera cylindrica</i>	Evaluation of antioxidant polyphenols from selected mangrove plants of India
2008*	Nguyen <i>et al.</i>	<i>Acanthus ebracteatus</i>	Sequence and transcript analyses of antioxidant genes from <i>Acanthus ebracteatus</i> Vahl
2008*	Nusrat <i>et al.</i>	<i>Excoecaria agallocha</i>	<i>In vitro</i> antioxidant property of the extract of <i>Excoecaria agallocha</i> (Euphorbiaceae)
2008*	Roome <i>et al.</i>	<i>Aegiceras corniculatum</i>	A study on antioxidant, free radical scavenging, anti-inflammatory and hepatoprotective actions of <i>Aegiceras corniculatum</i> (stem) extracts
2009	Sobiyaraj <i>et al.</i>	<i>Annona squamosa</i>	The hepatoprotective effect of alcoholic extract of <i>Annona squamosa</i> leaves on experimentally induced liver injury in Swiss albino mice
2009	Satyanarayana <i>et al.</i>	<i>Capparis sepiaria</i>	Hepatoprotective activity of <i>Capparis sepiaria</i> stem against carbon tetrachloride induced hepatotoxicity in rats
2009	Rajeshkumar <i>et al.</i>	<i>Plumbago zeylanica</i>	Hepatoprotective activity of aerial parts of <i>Plumbago zeylanica</i> . Linn against carbon tetrachloride induced hepatotoxicity in rats
2009	Rajan <i>et al.</i>	<i>Cassia tora</i>	Hepatoprotective effects of <i>Cassia tora</i> on CCl ₄ induced liver damage in albino rats
2009	Tiwari and Khosa	<i>Sphaeranthus indicus</i>	Hepatoprotective and antioxidant effect of <i>Sphaeranthus indicus</i> against acetaminophen induced hepatotoxicity in rats
2009	Chaudhari <i>et al.</i>	<i>Momordica charantia</i>	Hepatoprotective activity of hydroalcoholic extract of <i>Momordica charantia</i> Linn. leaves against carbon tetrachloride induced hepatopathy in rats.

2009	Das <i>et al.</i>	<i>Moringa pterygosperma</i>	Hepatoprotective activity of plant <i>Moringa pterygosperma</i> against carbon tetrachloride (CCl ₄) induced hepatopathy in rats.
2009	Hadaruga and Hadaruga	<i>Silybum marianum</i>	Antioxidant activity of hepatoprotective silymarin and <i>Silybum marianum</i> L. extract
2009	Thakare <i>et al.</i>	<i>Cocculus hirsutus</i>	Hepatoprotective effect of <i>Cocculus hirsutus</i> on bile duct ligation induced liver fibrosis in albino rats
2009	Girish <i>et al.</i>	<i>Achillea millefoliu</i> <i>Capparis spinosa</i> , <i>Cassia occidentalis</i> <i>Cichorium intybus</i> , <i>Solanum nigrum</i> <i>Tamarix gallica</i> <i>Terminalia arjuna</i> , <i>Andrographis paniculata</i> , <i>Apium graveolens</i> , <i>Asteracantha longifolia</i> , <i>Cassia angustifolia</i> , <i>Trachyspermu m ammi</i> , <i>Trigonella foenum etc.</i> ,	Hepatoprotective activity of six polyherbal formulations in CCl ₄ liver toxicity in mice
2009	Pradeep <i>et al.</i>	<i>Anogeissus latifolia</i>	Hepatoprotective evaluation of <i>Anogeissus latifolia</i> : <i>In vitro</i> and <i>in vivo</i> studies

2009	Sisodia and Batnagar	<i>Eugenia jambolana</i>	Hepatoprotective activity of <i>Eugenia jambolana</i> Lam. in carbon tetrachloride treated rats
2009	Rekha et al.	<i>Mimosa pudica</i>	Hepatoprotective activity of <i>Mimosa pudica</i> leaves against Carbontetrachloride induced toxicity
2009	Natanzi	<i>Nasturtium Officinale</i>	An experimental model for study of the hepatoprotective activity of <i>Nasturtium officinale</i> (Watercress) against acetaminophen toxicity using <i>in situ</i> rat liver system
2009	Vidyalakshmi et al.	<i>Mussaenda dona aurora</i>	Hepatoprotective and antioxidant activity of two iridoids from <i>Mussaenda dona aurora</i>
2009	Arulkumaran et al.	<i>Cassia roxburghii</i>	<i>Cassia roxburghii</i> seeds protect liver against toxic effects of ethanol and carbon tetrachloride in rats
2009	Marina et al.	<i>Flacourtia indica</i>	Protective effects of <i>Flacourtia indica</i> aerial parts extracts against paracetamol induced hepatotoxicity in rats
2009	Rosa et al.	<i>Prostechea michuacana</i>	Hepatoprotective and inhibition of oxidative stress of <i>Prostechea michuacana</i>
2009	Chaudhari et al.	<i>Cassia fistula</i>	Hepatoprotective activity of <i>Cassia fistula</i> seeds against paracetamol induced hepatic injury in rats
2009	Razik et al.	<i>Juncus subulatus</i>	Chemical constituents and hepatoprotective activity of <i>Juncus subulatus</i>
2009*	Ravikumar et al.	<i>Suaeda monoica</i>	Hepatoprotective effect of an Indian salt marsh herb <i>Suaeda monoica</i> Forsk. Ex. Gmel against concanavalin-A induced toxicity in rats

2009*	Jayanta <i>et al.</i>	<i>Excoecaria agallocha</i>	Screening of antioxidant and antifilarial activity of <i>Excoecaria agallocha</i> . L.
2009*	Suganthy <i>et al.</i>	<i>Rhizophora mucronata</i>	Mangrove plant extracts: Radical scavenging activity and the battle against food borne pathogens
2009*	Vadlapudi and Chandrasekhr Naidu	<i>Bruguiera gymnorrhiza</i> , <i>Acanthus ebracteatus</i> <i>Avicennia marina</i> <i>Rhizophora mucronata</i> <i>Lumnitzera racemosa</i> <i>Avicennia officinalis</i> <i>Avicennia alba</i> <i>Avicennia corniculatum</i> <i>Excoecaria agallocha</i> <i>Ceriops decandra</i>	Evaluation of antioxidant potential of selected mangrove plants
2009*	Wangensteen <i>et al.</i>	<i>Xylocarpus moluccensis</i> <i>Xylocarpus granatum</i>	Chemical and biological studies of medicinal plants from the Sundarbans mangrove forest

* Indicates mangrove plants