



**REVIEW ARTICLE**

**Natural Herbal Medicines Used As Anti-Ulcer Agents: A Pharmacological Review**

**Srivastava S<sup>\*1</sup>, Jaiswal J<sup>1</sup>, Gautam H<sup>1</sup>, Sharma S<sup>1</sup>**

*<sup>\*1</sup>Invertis Institute of Pharmacy, Invertis University, Bareilly, India.*

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**ABSTRACT**

Herbal drugs are traditional method of treating the disease in the world wide, the plant having ability to treat the disease is known as medicinal plants. Several types of medicinal plants are exists in the nature and effective in different type of disease. Peptic ulcers are a broad term that includes ulcers of digestive tract in the stomach or the duodenum. The formation of peptic ulcers depends on the presence of acid and peptic activity in gastric juice plus a breakdown in mucosal defenses. There are two major factors that can disrupt the mucosal resistance to injury: non-steroidal anti-inflammatory drugs (NSAIDs) example, aspirin and *Helicobacter pylori* infection. Numerous natural products have been evaluated as therapeutics for the treatment of a variety of diseases, including peptic ulcer. This article reviews the anti-acid/anti-peptic, gastro-protective and/or antiulcer properties of the most commonly employed herbal medicines. This article will be concerned only the pharmacology of that plant which shows the antiulcer and gastro-protective effects and among all the plants which one is more potent for anti-ulcer activity.

**KEYWORDS**

Peptic ulcer, NSAIDs, *Helicobacter pylori*.

**INTRODUCTION**

An ulcer is basically an inflamed break in the skin or the mucus membrane lining the alimentary tract. Ulceration occurs when there is a disturbance of the normal equilibrium caused by either enhanced aggression or diminished mucosal resistance. About 19 out of 20 peptic ulcers are duodenal.<sup>1</sup> The regurgitation of bile acid injures the gastric mucosa and weakens the gastric mucosal barrier, acid peptic disease include hyperacidity, gastro-esophageal reflux, stress induced mucosal erosions peptic ulcers, a localized loss of gastric as well as duodenal mucosa leads to the formation of peptic ulcer.<sup>2</sup>

Gastric ulcers, found in the stomach wall, are less common. The gastric mucosa is continuously exposed to potentially injurious agents such as acid, pepsin, bile acids, food ingredients, bacterial products (*Helicobacter pylori*) and drugs. These agents have been implicated in the pathogenesis of gastric ulcer, including enhanced gastric acid and pepsin secretion, inhibition of prostaglandin synthesis and cell proliferation growth, diminished gastric blood flow and gastric motility.<sup>1</sup>

1. Drug treatment of peptic ulcers is targeted at either counteracting aggressive factors or stimulating the mucosal defenses;
2. The goals of treating peptic ulcer disease are to relieve pain, heal the ulcer and prevent ulcer recurrence.

**\*Address for Correspondence:**

**Shruti Srivastava**

Invertis Institute of Pharmacy,

Invertis University,

Bareilly, India.

**E-Mail Id:** [shrutimpharm17@gmail.com](mailto:shrutimpharm17@gmail.com)

A large number of spices and herbs have been evaluated by various researchers for their antiulcer effects to achieve a favorable outcome. Large numbers of medicinal plants and dietary nutrients have been shown to possess gastro-protective activities such as Aloe, *Terminalia chebula*, *Vetiveria zizanioides*, Ginseng, Capsicum etc. In spite of being one of the well-known medicinal plants used in Indian traditional medicine to treat several ailments, studies pertaining to the pharmacological properties of some medicinal plants are very scarce. We studied the antiulcer activity and acute toxicity of some medicinal plants. Our investigation showed that these investigated medicinal plants could prevent ulcer in rats in a dose-dependent manner. Histological studies revealed that these medicinal plants did not show any acute toxicity. Preliminary phytochemical screening of this medicinal plant identified the presence of important secondary metabolites like flavonoids and tannins. A variety of botanical products have been reported to possess antiulcer activity but the documented literature has centered primarily on pharmacological action in experimental animals. Except for a few phytochemical compounds (i.e. aloe, liquorice and chilly), limited clinical data are available to support the use of herbs as gastro-protective agents and thus, the data on efficacy and safety are limited. Despite this, there are several botanical products with potential therapeutic applications because of their high efficacy and low toxicity. Finally, it should be noted that substances such as flavonoids, aescin, aloe gel and many others, that possess antiulcer activity are of particular therapeutic importance as most of the anti-inflammatory drugs used in modern medicine are ulcerogenic.<sup>3-5</sup> Active principles of antiulcer activity are flavonoids, terpenoids and tannins.

### Pathophysiology of Peptic Ulcers<sup>6</sup>

Peptic ulcer is a break in the lining of the stomach or duodenum. The break can involve the mucosa, muscularis mucosa, sub-mucosa, and in some cases, the deeper layers of the muscle wall.

### *Helicobacter Pylori*

*H. pylori*, a gram-negative, spiral-shaped bacterium, are most common cause of NSAID-associated peptic ulcer disease. *H. pylori* mainly found in the gastric antrum. It lives in the acidic environment of the stomach and is acid resistant because of its production of the enzyme urease, which converts urea to ammonia. The ammonia buffers the H<sup>+</sup> and forms ammonium hydroxide, creating an alkaline cloud around the bacterium and protecting it from the acidic environment of stomach. Urease is one of these damaging factors because it is an antigen that causes a strong immune response. In addition, the ammonium hydroxide produced by urease causes gastric epithelial cell injury.

### *Non-Steroidal Anti Inflammatory Drugs (NSAID)*

NSAID associated gastrointestinal damage is liable to produce topical injury as well as systemic effects of NSAIDs.

- i. **Local Effect:** - Most of the NSAIDs are weak organic acids. These drugs are neutral compounds in acidic environmental of stomach, cross the plasma membrane and enter gastric epithelial cells. In the neutral intracellular the drugs are reionized and trapped, resulting in intracellular damage representing local gastrointestinal injury associated with NSAID use.
- ii. **Systemic Effect:** - NSAIDs causes systemic injury because of decreased mucosal prostaglandin synthesis. Two cyclooxygenase (COX) enzymes catalyze the formation of prostaglandins from arachidonic acid. COX-1 is constitutive in nature and produces the gastric prostaglandins responsible for mucosal integrity, whereas COX-2 is inducible as it is induced by inflammatory stimuli. COX-1 inhibition by NSAIDs can lead to mucosal ulceration because inhibition of PGE<sub>2</sub> synthesis removes one of the protective mechanisms maintaining the integrity of the gastric mucosa.

### **Acid Hyper Secretion**

Another causative factor in patients of peptic ulcer disease is acid hypersecretion, characterized in Zollinger Ellison syndrome and Cushing's syndrome in which hyperacidity leads to peptic ulcer disease. In Zollinger Ellison syndrome, a gastrin-secreting tumour of the known beta cells of the endocrine pancreas leads to increased acid secretion. In Cushing's ulcers, seen in patient with several head injuries, heightened vagal (cholinergic) tone causes gastric hyperacidity.

### **Other Factors**

Pepsin, digestive enzyme secreted by gastric chief cells as the inactive precursor pepsinogen, has role in ulcer disease because of its impairment of mucosal blood flow and healing and its inhibition of pancreatic bicarbonate production. Caffeine ingestion (increased acid secretion), alcoholic cirrhosis, glucocorticoid use, and genetic influences are also associated with peptic ulcer disease. Finally, chronic psychological stress (stress induced ulcers) may occasionally be an important cause of peptic ulcer disease.<sup>7</sup>

### **Inhibition of gastric secretion by post stomach intestinal factors**

Intestinal chime stimulates gastric secretion during the intestinal phase of secretion and paradoxically, it often inhibits gastric secretion during the gastric phase. This inhibition results from at least two influences:

- i. The presence of food in the small intestine initiates a reverse entero-gastric reflex. Transmitted through the myenteric and vagus nerves, that inhibits stomach secretion. The reflex can be initiated by distention of the small bowel, the presence of acid in the intestine, the presence of protein breakdown products, or irritation of the mucosa. This complex mechanism explains slowing down of stomach emptying when the intestines are already filled.
- ii. The presence of acid, fat, protein breakdown

products, hyperosmotic or hypo-osmotic fluids, or any irritating factor in the upper small intestine causes the release of several intestinal hormones. One of these is secretin, which is especially important for control of pancreatic secretion. However, paradoxically, secretin opposes stomach secretion. Three other hormones—gastric inhibitory peptide, vasoactive intestinal polypeptide, and somatostatin – also have slight to moderate effects in inhibiting gastric secretion. Stomach secretes a few milliliters of gastric juice each hour during the “inter-digestive period” when little or no digestion is occurring anywhere in the gut, non-oxytic type composed mainly of mucus that contains little pepsin and almost no acid. Emotional stimuli frequently increase inter-digestive gastric secretion to 50 milliliters or more (and highly peptic and acidic) per hour. This increase of acid secretion may also be responsible for peptic ulcer disease.<sup>7</sup>

### **The Medicinal Plants Used in the Treatment of Ulcer**

The goals of the treating peptic ulcer disease are to relieve pain, heal and prevent ulcer recurrence. There is no cost effective treatment that meets all these goals and efforts were made to find suitable agents for treatment from plant origin.<sup>8</sup> Herbal prescription and natural remedies are commonly employed in developing countries of the treatment of various diseases, this practice being an alternative in orthodox pharmacotherapy. These herbal medicines derived from various plants extracts are being increasingly utilized to treat a wide variety of clinical diseases.<sup>9</sup> Preliminary photochemical screening of the medicinal plants identified the presence of important secondary metabolites like flavonoids, aescin, aloe gel and many others, that possess antiulcer activity are of particular therapeutic importance as most of the anti-inflammatory drugs used in modern medicines are ulcerogenic. Active principles of antiulcer are flavonoids, terpenoids and tannins.<sup>3</sup>

Table 1: List of Plants Having Antiulcer Activity

S.No	Name	Family	Part	Extract	Screening Model
1	<i>Azima tetraacantha</i>	Salvadoraceae	Leaves	ethanolic	Aspirin plus pylorus and cold restraint stress induced ulcer
2	<i>Alstonia scholaris</i> R. Br	Apocynaceae	Leaves	Dichloromethane and ethyl acetate	Indomethacin induced ulcer
3	<i>Annona squamosa</i>	Annonaceae	Leaves, fruits, seeds, bark	Aqueous	Pylorus ligation
4	<i>Benincasa hipsida</i>	Cucurbitaceae	Fruits	Petroleum ether, methanolic, aqueous and ethyl acetate	Pylorus ligation
5	<i>Ficus religiosa</i>	Moraceae	Leaves	Ethanol	Pylorus ligation
6	Rocket " <i>Erica-sativa</i> "	Brassicaceae	Leaves	Ethanol	Pylorus ligation
7	<i>Momordica charantia</i>	Cucurbitaceae	Seeds	Methanol	Ethanol induced and NSAID induced ulcer
8	<i>Morinda citrifolia</i>	Rubiaceae	Fruits	Ethyl acetate	Pylorus ligation
9	<i>Plectanthurus ambonicus</i>	Lamiaceae	Whole plant	Ethanolic, ethyl acetate and aqueous extracts	Pylorus ligation

### ***Azima Tetraacantha***

*Azima tetraacantha* (Salvadoraceae) is a well-known medicinal plant whose root has been advocated for various ailments such as dropsy and rheumatism. *A. tetraacantha* leaves possess stimulant, expectorant and antispasmodic activities<sup>10</sup>; analgesic effect<sup>11</sup> and anti-inflammatory effect<sup>12</sup>. The ethanolic extract of *A. tetraacantha* leaves were investigated for its ulcer protective activity on aspirin plus pylorus ligation and cold restraint stress induced ulcer models. Various biochemical parameters such as

gastric volume, pH of gastric content, free acidity and total acidity, dissolved mucous substances such as total protein, hexoses, hexosamine, fucose and sialic acid were estimated in 90% alcoholic precipitate of gastric juice and histopathological sections were examined on the test and control group animals. The extract at a concentration of 200 and 400 mg/kg exhibited a protective effect on ulcer-induced models in a dose dependent manner and was comparable with the standard drugs



ranitidine and omeprazole. The present study revealed that the extract of *A. tetraantha* had ulcer protective activity comparable with standard drugs ranitidine (50mg/kg) and omeprazole (10mg/kg), which may be mediated by its antioxidant effects.<sup>13</sup>

### ***Alstonia Scholaris***

*Alstonia scholaris* R.Br. (Family: Apocynaceae) (also known as Devils tree, Dita Bark tree) has long been used as a traditional medicine to cure various human and livestock ailments. The plant is grown in the lowland and mountain rainforests of India, the Asia-Pacific, Southern China and Queensland. The plant grows throughout the humid regions of India, especially in West Bengal and west-coast forests of south India. The plant is used in Ayurveda, Unani and Siddha/Tamil types of alternative medicinal systems. The plant is traditionally being used in debility, arthritis, impotence, wounds and, asthma, leucorrhoea, dog bite, fever, cancer, tumour, jaundice, hepatitis, malaria, skin diseases diarrhea, leprosy, mental disorders, cardiopathy, helminthiasis, pruritus, agalactia, hypertension, dental or gum problem, abdominal pain after delivery and swelling. It is also used as aphrodisiac, antidote to poison, abortifacient, astringent and thermogenic, cardiogenic, stomachic and expectorant. Reports are available on its ethno-veterinary use such as fever in cattle. Ayurvedic use is found in phosphaturia and as a blood purifier.<sup>14</sup> Male albino wistar rats were divided into four groups of six animals each as follows: group 1 served as control which received 2% w/v Tween 80, p.o., group 2 was administered with indomethacin 30 mg/kg, p.o. while group 3 and group 4 were test groups which received dichloromethane 30mg/kg, p.o. and ethyl acetate 30mg/kg, p.o., respectively. The groups of animals treated with dichloromethane and ethyl acetate extract of leaves of *A. scholaris* did not show ulceration in the stomach after 16 h of fasting, whereas the ulcer score was found to be significantly high ( $p < 0.01$ ) in rats administered Indomethacin. Treatment with the fractions for seven days did not show any ulceration whereas the ulcer score

was significantly ( $p < 0.01$ ) high with Indomethacin treated rats.<sup>15</sup>

### ***Annona Squamosa***

The plant *Annona squamosa* (Annonaceae) is commonly called as custard apple in English sharifa in Hindi. The medicinal properties of *A. squamosa* were reported as hypoglycemic, anti-diabetic, antitumor and antioxidant. Hepatoprotective activity of leaves of *A. squamosa* documented by Saleem et al. the crushed leaves was sniffed to overcome hysteria and fainting spells. Traditionally the leaves were applied to ulcer and wounds. The gastro protective activity was evaluated by ethanol induced and pylorus ligated rats in experimental animal. The effect of extract was compared with ranitidine (20 mg/kg) as the reference drug. The aqueous extract of leaves of *A. squamosa* found to be safe up to 3000mg/kg. The extent of gastro protective effect of the test extract were 5.27% and 72.00% at 250 mg/kg and 500 mg/kg doses respectively which is comparable to ranitidine. Similar results were obtained with pylorus ligated ulcer model also. The test extract were showed gastro protection in a dose dependent manner i.e. 44.27% and 67.43% protection at 250 and 500 mg/kg doses respectively.<sup>16</sup>

### ***Benincasa Hipsida***

It belongs to the family Cucurbitaceae and is commonly known as *Bhuru Kolu* or *Safed Kolu* (Gujarati), Petha (Hindi), white pumpkin or wax gourd or ash gourd (English), and *Khushmanda* (Sanskrit). Fruits of this plant are traditionally used as laxative, diuretic, tonic, aphrodisiac, cardiogenic, urinary calculi, blood disease, insanity, epilepsy and also in cases of jaundice, dyspepsia, fever, and menstrual disorders.<sup>17</sup> The methanolic extract of the fruit was reported to possess antiulcer,<sup>18</sup> anti-inflammatory,<sup>19</sup> antihistaminic, and antidepressant activities.<sup>20</sup> Preliminary thin layer chromatography (TLC) study was carried out for checking the presence of phyto-constituents as beta sitosterol<sup>21</sup>, luprol, iso-vitexin, iso-multiflorenol, cucurbitacin-B, different amino acids, etc. which have been reported to be present in the fruit of *B. hipsida*. However, a protective effect against ulceration

(ulcer area) was noticed in animals treated with omeprazole (20 mg/kg), 300 mg/kg of petroleum ether and methanolic extract of *B. hipsida* on ethanol induced, pylorus ligated, cold related stress model was found to be 49.03, 85.26, 62.13% and 67.36, 75.96, 51.52 % respectively.<sup>17</sup>

### ***Ficus Religiosa***

*Ficus religiosa* (Moraceae) is an important traditional medicinal plant distributed throughout India, most nearly to the Indian temple for the spirituality. It has several vernacular names including peepal tree and arasa maram. The bark of the plant contains carbohydrates, flavanoids, amino acids, steroids, saponins and tannins etc. are present.<sup>21</sup> Bark and leaf extract of this plant is being used in the traditional medicine. The ethanol extract of the *F. religiosa* was evaluated for the presence of flavonoids, tannins, alkaloids, saponins, glycosides and sterols/triterpenes. Bark of the plant is used as gonorrhoea, diarrhoea, dysentery, leucorrhoea, menorrhagia, vaginal and other urogenital disorders hemorrhoids, ulcers and gastrophelcosis. It is also useful in inflammation, anti-diabetic and antioxidant.<sup>22</sup> The animals treated with *F. religiosa* leaf extract 500 mg/kg did not produce any significant change in the volume of gastric secretion as compared to rats which received standard drug ranitidine. Microscopical examination of the stomachs removed from animals that were not treated with either ranitidine or *F. religiosa* showed complete ulceration. However, a protective effect against ulceration (in terms of ulcer area) was noticed in animals treated with ranitidine, 250 mg/kg and 500 mg/kg ethanolic extract of *F. religiosa* was found to be 45.23% and 61.42% respectively.<sup>23</sup>

### **Rocket "*Eruca sativa*"**

"*Eruca sativa* L." (EER), a member of the Brassicaceae family, has gained greater importance as a salad vegetable and spice, especially among Middle Eastern populations and Europeans.<sup>24</sup> It is believed that plants belonging to the Brassicaceae family possess diversified medicinal and therapeutic properties

including inhibition of tumorigenesis<sup>25</sup>, anti-ulcer<sup>26</sup>, and hepatoprotective<sup>27</sup> activities. Rocket, locally known as Jarjeer, is used in salads, by local herbal practitioners and in Unani medicine, and is used as a diuretic, stimulant, and in the treatment of stomach disorders and scurvy<sup>28</sup>. The seeds and tender leaves are known in Arabian countries to increase sexual desire and are considered to be an aphrodisiac. It is also used as a carminative and to alleviate abdominal discomfort and improve digestion. It has been reported that the rocket seed ethanolic extract possesses potent antioxidant and renal protective and diuretic activities<sup>29-31</sup>. Three novel quercetin triglycoside, in addition to their acylated sinapoyl derivatives, have been isolated and identified from its leaves. It was found that the percentage of the aglycone kaempferol and its glycosides in the edible parts of *E. sativa* was more than that of quercetin. It was reported that all rocket species tissues, except roots, contained significant levels of poly-glycosylated flavonoids, with/without hydroxyl-cinnamoyl acylation. The core aglycones kaempferol, quercetin, isorhamnetin and the anthocyanins were only detected in *E. sativa* flowers.<sup>32</sup> In pylorus-ligated Shay rats, the ethanolic extract of Rocket "*E. sativa* L." (EER) significantly and dose-dependently reduced the basal gastric acid secretion, titratable acidity and ruminal ulceration. Rocket extract significantly attenuated gastric ulceration induced by necrotizing agents (80% ethanol, 0.2 mol/L NaOH, 25% NaCl), indomethacin and hypothermic restraint stress. The anti-ulcer effect was further confirmed histologically.<sup>33</sup>

### ***Momordica Charantia***

Plant *Momordica charantia* Linn, known as bitter gourd in English, belongs to family Cucurbitaceae. It is cultivated throughout India, Malaya, China, Tropical Africa, and America. Earlier claims showed that its bitter fruits have carminative, aphrodisiac, and anthelmintic properties, and are used in syphilis, rheumatism, troubles of spleen, and ophthalmia. It is also useful in piles, leprosy, jaundice, and also used as a vermifuge. Upon a

literature review, it was found that the plant contains moisture (83.2%), proteins (2.9%), fat (1.0%), carbon (9.8%), fibers (1.7%), mineral matters (1.4%), calcium, phosphorus, iron, carotene, thiamine, nicotinic acid, riboflavin, ascorbic acid (88 mg/100 g), copper, and potassium. Charantin,  $\beta$ -sitosterol-glucoside, stigmast-5, 25-dien-3  $\beta$ -*O*-glucoside, stigmast-7, 25-dien-3  $\beta$ -ol, and stigmast-7, 22, 25-trien-3  $\beta$ -ol are isolated from the fruit. Many pharmacological properties have been reported including antioxidant, adipogenesis-reducing, anti-lipolytic, hypoglycemic, anti-diabetic, anti-cancer, anti-fertility, anti-genotoxic, anthelmintic, anti-microbial, anti-viral, and hepatoprotective activity. However, there are no reports to our knowledge on its analgesic and antipyretic activities. Hence, the present study was undertaken to investigate the analgesic and antipyretic potential of the ethanolic and aqueous fruit extract of *M. charantia* Linn. in experimental animal models.<sup>34</sup> The methanolic extract of *M. charantia* seed at a dose of 300 mg/kg showed 45.71% and 58.80% inhibition of gastric ulcers in ethanol induced gastric ulcer and NSAIDs induced gastric ulcer models respectively, whereas the dose of 500 mg/kg showed 62.85% and 69.90% inhibition of gastric ulcers in ethanol induced gastric ulcer and NSAIDs induced gastric ulcer models respectively.<sup>35</sup>

### ***Morinda Citrifolia***

*Morinda citrifolia* Linn Rubiaceae known commercially as Noni grows widely throughout the Pacific and is one of the most significant sources of traditional medicines among Pacific island societies. The Noni plant is used in combinations for herbal remedies. The fruit juice is in high demand in medicine for different kinds of illnesses such as arthritis, diabetes, high blood pressure, muscle aches and pains, gastric ulcers, menstrual difficulties, headaches, heart disease, AIDS, cancers, gastric ulcers, sprains, mental depression, senility, poor digestion, atherosclerosis, blood vessel problem, and drug addiction. A number of major components has been identified in the Noni plant such as octoanoic acid, potassium, vitamin c, scopoletin,

terpenoids, alkaloids, anthraquinones (such as nordamnacanthal, morindone, rubiadin, rubiadia-1-methyl ether, antraquinone glycosides)  $\beta$ -sitosterol, carotene, vitamin A, flavone glycosides, linoleic acid, alizarin, amino acids, acubin, l-asperuloside, caproic acid, caprylic acid, ursolic acid, rutin and putative proxeronine. Antitumor activity expressed in enhanced survival of tumor-bearing mice has been demonstrated after treating with juice extracts. Aqueous extracts of roots were shown to have an analgesic effect on mice without any sign of toxicity and a sedative effect at high doses. Effect of *M.citrifolia* on gastric volume, free acid, total acid and ulcer in pylorus ligated rats were studied. *M.citrifolia* (200 and 400 mg/kg) inhibited the volume of gastric juice secreted by the control rats by 21.559% and 53.54%, respectively. The free acid and the total acid were reduced by the extract to 39.03, 17.77% and 52.55, 30.30%, respectively for the 200 and 400mg/kg. *M.citrifolia* administered in doses 200 and 400 mg/kg orally cause a dose dependent decrease in ulcer index in pylorus ligated rats. The dose of 400 mg/kg showed maximum ulcer protection of 55.6%.<sup>36</sup>

### ***Plectranthus Amboinicus***

*Plectranthus amboinicus* belongs to the family *lamiaceae*. It is one such plant used traditionally for its curative property in treating fever, asthma, ulcer, inflammatory disorder. From the literature survey, *P. amboinicus* possess fungitoxic, anti-bacteria, anti-malarial, anti-inflammatory, hepatoprotective and diuretic activity. Anti-ulcer activity performed by pylorus ligation-induced ulcer model in wistar albino rats in which ability of different extract of *P. amboinicus* was tested in at dose level of 200mg/kg body weight orally and compared with Ranitidine (30mg/kg) as standard. The results of percentage inhibition of gastric ulcer by the ethanolic, ethyl acetate and aqueous extracts of *P. amboinicus* at 200mg/kg were 72.72, 36.36 and 45.45% respectively. The percentage inhibition of gastric ulcer of standard ranitidine 30mg/kg p.o. found to be 77.27%.<sup>37</sup>



## CONCLUSION

Oldest medicinal systems in the world provide leads to find therapeutically useful compounds from plants. Therefore, ethno medicinal knowledge supported by modern science is necessary to isolate, characterise, and standardize the active constituents from herbal source. This combination of traditional and modern knowledge can produce better antiulcer drugs with fewer side effects. Herbs are widely available in different countries. The present folklore review has to focus on the certain herbs, which are traditionally mentioned as an antiulcer in a folk literature of Materia Medica and are to be investigated for their antiulcer activity. Research on natural products often is guided by ethno-medicinal knowledge, and has brought substantial contributions to drug innovation by providing novel chemical structures and/or mechanisms of action. A large number of herbal extracts are used in folk medicine to treat various types of disorders. This review has wide scope for researcher to compile literature data of antiulcer drug and intense study on evaluated use of certain herbs for their better acceptability in therapeutics. Hence the review study is concluded that the herbal drug possesses antiulcer activity it has been proved by different animal models give many links to develop the future trials.

Among all the plants *Benincasa hipsida*, *Momordica charantia* and *Plectanthus ambonicus* found to have potent for anti-ulcer activity as compared to other plants.

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