

Hemiparasite is a type of parasite which depends on the other seedling plant for both nutrient and water and little bit carbon. Vidal-Russell & Nickrent, (2008) stated Loranthaceae as a family of Santalales comprises about 73 genera and 900 species. According to Hegi, (1981) *Loranthus* L. contains between 450 to 500 species. Morphology (mainly leaves and stem) and anatomy of this species are not so exposed. Demuth and Weber, (1987) they first investigated the anatomy of the leaf under the family Loranthaceae. Though a little study had been conducted over Loranthaceae and noted on *Flora Iranica* (Rechinger, 1976) in Iran, but the taxonomic description in the same flora of the species is rather vague as the key of identification of different and their distribution are not up to the mark. Barthlott, et al, (1998) discussed the classification, terminology, and value of the plant in field of taxonomic literature and his literature showed epicuticular waxes which is present in 13,000 plant species. Azuma, et al, (2000) worked on the *Loranthus* and concluded that seeds are enclosed within sac like compact tissue which is smooth at the side of endosperm and hairy cells are also present on the either side. According to different scientist like Venturelli, (1981); Parker and Riches, (1993); Reid, et al, (1994); Musselman and Press, (1995); Pennings and Calloway, (1996); Silva and Martinez, (1996); Sinha and Bawa, (2002) stated that most studies on parasites are mainly focused on either ecology based or on economic aspects due to their harmful effects on host related timber yielding.

According to the Adsersen and Adsersen, (1997); Novy, (1997); Saleh, (2005) shows, that the parasites are mainly considered as poisonous and in some cases as medicinal plants. In various diseases such as jaundice, hepatic disturbances, bacillary dysentery, antihypertensive or diuretic etc were found to recover by using some species of mistletoe.

Recently, importances are mostly emphasis on mistletoe as it shows great medicinal efficacy. Tripathi and Mondal, (2012) also work on the species and concluded that various plants and their parts are used for medicinal purpose from ancient age. In different parts of Bengal, People use some hemi-parasitic taxa or parts of it related to their health issues. Karim and Azlan, (2012) work on the phytochemicals constituents and active principles present in plants or its different parts, which are related to numerous health promoting and disease controlling benefits. Therefore, we need to gather more knowledge regarding these plants to utilize their active principle for development of new medicinal supplements and also extensive investigation is essential for their bioactive phytochemicals and their key biological activities. Duraipandiyan, et al, (2006) concluded that there are a variety of bioactivities as well as phytochemicals which are used for the potential treatment described in folk medicine for long history for curing diseases.

Phytochemicals are defined as compounds of chemical origin that naturally present in plants and responsible for organoleptic characters as well as colour. Generally, this term is used to those chemicals which are not listed under essential nutrients rather than they have biological significance. It is estimated by the scientists that there are a thousand or numerous phytochemicals compounds which are potential to cure destructive diseases like stroke, cancer or metabolic syndrome. Ajayi, et al, (2011) also stated that these Antibiotics or antimicrobial properties are because of saponins, glycosides, flavonoids and alkaloids etc. are occurred and distributed in plants, though these compounds were not well examined on the basis of medicinal point of view due to lack of proper knowledge, their efficacy and techniques.

Albrecht, et al, (2006) given a brief idea about Nano, a scientific term used for determining the size of the particle. Synthesis of nanoparticles through biological method from plant sources such as *Chenopodium album* (Dwivedi, et al; 2010), *Acalypha indica* (Krishnaraj, et al; 2010), *Diopyros kaki* (Song, et al; 2008), *Cynodon dactylon* (Supraja, et al; 2013), *Glycyrrhiza glabra* (Dinesh, et al; 2012) *Nigella sativa*, etc. (Sivarajanji, et al; 2013) also stated that modification of size and shape increase efficiency of particles and used in different application. Among Few plants such as *Mimosa pudica* (leaves) had shown to exhibit various medicinal properties such as anti-diabetic (Hader, 1993), anti-allergic (Kalus, et al; 2003), anti-inflammatory, antibacterial, antioxidant and anticancer activity (Bourgou, et al; 2012). According to Aguwa, (2004) diabetes is a type of syndrome which has severe socio-economic importance characterized by hyperglycaemia, due to deficiency (absolute or relative) of insulin.

The plant *Macrosolen cochinchinensis* was first established as a name of *Loranthus cochinchinensis* by Loureiro, F.L. Coch. (1790). the plant as a name of *Macrosolen* first identified and studied by Van Tieghem (1894). The genus *Macrosolen*, with about 30 species in the world, is distributed in India, Southern Asia, Malasia, Thailand, China to New Guinea by Barlow, (1997), (2002); Wilson and Calvin, (2006); Videl-Russel and Nickrent , (2008). Among the all species only 6 species are reported from India Rajsekaran, Singh, I.C. (2012). Most of the species of *Macrosolen* are aerial stem parasites and grow on Gymnosperms Wilson and Calvin, 2006a and b. More recently Singh, L.J. (2013) stated that most Indian species of Macrosolen grow on dicotyledonous trees with high host specify may sometimes show a visual resemblance to preferred host.

These genus consist of hemiparasitic shrubs on other seed plants, with opposite or scattered leaves and narrowly to broadly elliptical lamina. Inflorescence is lateral, subumbellate or spicate types. Flowers are mostly yellow or green or rarely pink or red color. Bract and bracteoles are present, bracts broadly ovate, bracteoles size varies 1-1.5 mm. stamen 6; anther 0.5-2.0 mm long, acute, about half to one third as long as the free part of the filament. Inferior ovary, one celled, ovule 1 with basal placentation. Berry orange, subglobose types. Van Tighem (1894) and Barlow, FL. Males (1995) stated the habit details are very poorly known.

Flowering periods of *Macrosolen cochinchinensis* generally August to September and appropriate harvest time in April to May Anonim, (1999). There is no detailed anatomical study on Loranthaceae family, A little work on histology was done by Vijay sodde et al; (2011) for deceit the authenticity of this medicinally useful plant.

Richard Lobo et al; (2011) work on phytochemical constituents and active principles present in the plants which are associated with various disease controlling and health promoting benefits. Pharmacognostical features of *M. cochinchinensis* had shown the precise taxonomy which is significant for the standardization of drug this work had been done by Zhao et al; (1998). This investigation will be useful for the appropriate botanical identification and authentication of the drug. According to Anonim, (1999) the whole plant or some parts of these plant are used as medicine. It potent jaundice, cough, wounds, and fungal infection, dysentery and inflammation Hargono, (1995).

These plant shows anti-cancerous property which is detected by Artanti et al; (2003). Tripathi and Mondal (2013) work on the species and concluded that in Indian folklore, these plant parts are used for medicinal purpose from ancient age. Ray et al; (2014) stated

that the plant extracts have been developed and proposed for use as antimicrobial substances.

*Viscum* is classified as a mistletoes by Kujit(1969 ) and Calder(1983). The genus *Viscum album* comes under the family Viscaceae by Barlow(1983) comprises about 100 species. The genus *Viscum* L. (mistletoes) comprises with a center of diversity in the Old World tropics and subtropics (Barlow, 1983). This parasite found on the higher plants Weber(1993). According to Barlow (1983), the morphological similarities between viscaceae and loranthaceae are a good example for convergent evolution. Morphological and anatomical studies are limited to *Viscum album*.

The leaf anatomy of Viscaceae was described by Weber (1987). The embryo and its endosperm, contains a mucilaginous tissue shown by Sallé,1983; Gedalovich et al.,(1988), called viscin, which is neutral polysaccharides consists of cellulose mixture and acidic in nature. Azuma et al., (2000) worked on the *Viscum* and concluded that seed is enclosed in sac like compact tissue that is smooth on the endosperm side, but covered with hairy cells on the other side. According to different scientist like Venturelli, (1981); Parker and Riches, (1993); Reid et al., (1994); Musselman and Press, (1995); Pennings and Calloway, (1996); Silva and Martinez, (1996); Sinha and Bawa, (2002) stated that parasitic flora scanned under the view of ecology as well as economy as they affect on timber production. Viscaceae mainly pollinated by bird and insect, it has been found that wind pollinated is possible but entomophily is more common Hawksworth and wiens(1996).

According to the Adsersen and Adsersen, (1997); Novy, (1997); Saleh, (2005) shows that parasitic plants are mostly considered as either medicinal or poisonous plants. Some species of mistletoe are used for jaundice, hepatic disturbances, bacillary dysentery, and as

an antihypertensive or diuretic. Karim and Azlan., (2012) work on the phytochemicals and active principles present in the plants which are related to numerous health promoting and disease controlling benefits.

The silver nano particles absorption peak is observed by Metcalf (1957).Duraipandian et al., (2006) concluded that plants has its own long history in folk medicine. There are a variety of phytochemicals constituents and bioactivities components for the potential treatment of different ailments and diseases.

Ademiluyi and Oboh, (2008) stated the medicinal effect of plants on the basis of antioxidant property found in hemiparasitic taxa.