INTRODUCTION

Indigenous medicine in the root of nearly all traditional and modern system of medicines in the world. Early accounts of medicinal use of plant can be found in ancient Vedic text, the Rigveda (4500 BC – 1600 BC) and detailed account of instructions and information to be used for prevention and treatment of diseases is found in Ayurveda (2500 – 6000 BC). “Shrusrutha Samhita” and “Charak Samhita” followed Ayurveda. Later it made a considerable progress in knowledge of medicinal plants during Buddhist period. Its influence infiltrated even to Egypt, Greece and Rome. The hidden treasures, which are still lying in the indigenous system of Indian Medicine used for curing many diseases in the past, still hold good for their remedial quality.

Plants are the miracle laboratories of nature to provide various kinds of drugs and medicines for maintenance of optimum health and vitality. So far, more than 100,000 biologically active secondary plant compounds have been isolated from higher plants, with most of these diverse structures falling into four main chemical classes, the phenolics (phenols, flavonoids, quinines, tannins and lignins), terpenoids (monoterpenes, sesquiterpene lactones, diterpenes, saponins and others), sulphur compounds (glucosinlates, disulphide and acetylenic thiophenes) and nitrogen compounds (alkaloids, amines, non-protein amino acids and cyanogenic glycosides) (Chung AC 1995). India is known for its biodiversity as of today about 1.26 lakhs plants species have been catalogued (Chopra &Chopra 1955).

Indigenous medicines continue to have strong roots amongst local community and to some extent privileged in urban locality. Zoopharmacognosy (the study of animal research of certain herbs to treat diseases) has revealed that instinct consistently provides certain animals with therapeutic information allowing them to use this natural system of medicines themselves. This system of medicines is of specific value in developing countries where precious allopathic veterinary medicines are often beyond the reach of livestock producers and still more than 80 percent of livestock population is deprived of modern and systemic approach of high tech allopathic treatment (Mc. Corkle CM 1982). Compare costs and benefits of choosing indigenous medicine in India where the commercial exploitation of herbal medicine has started at a long level, again showing their positive affect in the therapeutic regimen. At the same time, increased use of herbal medicine draws attention of scientific community towards over exploitation of plant resources.

Superiority of these drugs in term of “safe Drug” with parallel efficacy having without or least side effect over high tech allopathic drugs can force more attention and personal to research, development and extension of this system as scarcity of systemic literature. However, several modern researchers elaborated the use of natural medicinal plant drugs, being safer than synthetic chemicals because there is no side effect, less cost, no incidence of resistance and easily available at the door of farmers (Misri et.al. 2002, Malairajanet.al. 2006 & Kosalge and Fursule 2009). Moreover, Synergistic effect of their active ingredients and presence of minerals and salts are also beneficial in the treatment of Haemonchus contortus infestation in animals.
MATERIALS AND METHODS

Selection of experimental plants:
Plants were selected on the basis of literature and indigenous traditional knowledge. The selected plants were Aegle marmelos, Ailenthus excelsa, Annona squamosa, Bauhinia varigata, Butea frondosa, Calotropis gigantean, Calotropis procera, Chenopodium album, Chrysanthemum indicum, Cuscutta reflexa, Datura stramonium, Euphorbia hirta, Eucalyptus globules and Ficus religiosa. All the information regarding taxonomy and action are collect from the book "Encyclopedia of Indian Medicinal Plants" written by Dr. C.P. Khare.

Collection and processing of raw plant material:
The selected plant material were collected from the Botanical garden of school of Life Sciences, Khandari, Agra (U.P) during March – April 2013 and some of them were purchased from the local market. Plant materials were authenticated by taxonomic characteristics and consultation with experts. The selected plant materials were washed with clean water and allow shade dried for about 2-3 weeks. The dried materials were crushed in an electric grinder to coarse powder.

Preparation of crude plant extracts:
Crude plant extract was prepared by Soxhlet extraction method. About 100 gm of powder material was uniformly packed in to a thimble and run in Soxhlet extractor. It was exhaustible extracted with methanol for the period of about 48 hours or 22 cycles or till the solvent in the siphon tube of an extractor become color less. After the extracts were filtered with the help of filter paper and solvent evaporate in rotator and vacuum evaporator (Heidolph) to get the syrpy consistency. The residue was dried over anhydrous sodium sulphate to remove trace of alcohol. Then extract kept in refrigerator at 4°C for qualitative phytochemical analysis. The percent yield of different extracts was calculated.

Determination of extraction yield (% yield):
The yield (% w/w) from all the dried extracts was calculated as :
Yield (%) = (W1 x 100)/ W2
Where W1 is the weight of the extract obtained after drying of solvent and W2 is the weight of the plant powder.

Phytochemical analysis of different crude extract
Extracts in different solvents were tested for the presence of active principle such as steroids, Carbohydrates, fixed oils, tannins and phenolic, flavonoids, saponins, alkaloids, glycosides, triterpenoids and proteins. Satandard procedures (Debela A 2002).

RESULT AND DISCUSSION

Yield of crude methanolic extract
In present study total of seventeen crude methanolic extract were prepared from using different plant parts. Eucalyptus globules (Leaves) Yield highest (28.42%), while Bauhinia varigata (leaves) yield was lowest (18.67%). In case of fruit extract highest yield (33.40%) was in Annona squamosa followed by Aegle marmelos (32.23%) and in case of seed extract Butea frondosa yielded highest (30.67%) while Chenopodium album yielded lowest (18.45%). Difference of percent yield of extraction product among different extraction might be due to the solubility of various ingredients and method and type of extraction used (Paech & Tracy 1955). The details of all extract about percent yield and physical characteristics are given in Table 1.

Phytochemical analysis
Phytochemical analysis of different extracts were conducted by different tests to know the presence of active constituents like alkaloids, flavonoids, saponins, steroids, carbohydrate, glycosides, tannins, phenolic compounds, protein and triterpenoids. Phytochemical analysis of methanolic extracts of Ailenthus excels (leaves) showed presence of alkaloids, flavonoids, tannins and phenolic compounds and triterpenoids while in case of methanolic extract of Annona squamosa (leaves) flavonoids, tannins and triterpenoids were present, methanolic extract of Annona squamosa (seeds) showed alkaloids, carbohydrates, tannins and fixed oils. Methanolic extract of Aegle marmelos (leaves) showed the presence of alkaloids, flavonoids and triterpenoids during analysis while methanolic extract of Butea frondosa (seeds) alkaloids, tannins, and fixed oils were present, Bauhinia varigata (leaves) showed presence of alkaloids, flavonoids and tannins.

In case of methanolic extract of Calotropis procera and Calotropis gigantean (leaves) alkaloids, flavonoids and tannins were present in both the extracts while in methanolic extract Cuscutta reflexa (whole plant) only alkaloids and triterpenoids were present. In the extract of Chrysanthemum indicum (leaves) three compounds alkaloids, flavonoids and triterpenoids were present, while in seed of Chenopodium album alkaloids, saponins, glycosides, fixed oils and tannins were present, methanolic extract of Datura stramonium (leaves) showed the presence of alkaloids, flavonoids and tannins.

Methanolic extract of Euphorbia hirta (leaves) contains alkaloids, flavonoids, and tannins where as in methanolic extract of Eucalyptus globules (leaves) alkaloids, flavonoids, tannins and triterpenoids were present. Ficus religiosa (bark) contains alkaloids, carbohydrates and tannins. Results are portrayed in Table 2.
It was observed from the above observations that the presence of the alkaloids, flavonoids and tannins were necessary for anthelmintic activity. It was interesting to know that the absence of amines in the methanolic extract of all the plants which indicates towards the safety of feeding, because amines are usually toxic substance and this observation was further supported by (Thanabhorn et.al. 2006, Rajesh and Latha 2004 & Gupta and Mishra 2006).

REFERENCES


Paech, K. and Tracy, M.V. (1955). Modern methods of plant analysis, III.

