SUMMARY

80% population of the developing countries still depends on their surrounding vegetation. Though at present Indian health care delivery consists of both traditional and modern system of medicines, both organized traditional system of medicine like Ayurveda, Siddha and Unani and unorganized system like folk medicine have been flourishing well. Ayurveda and Siddha are of Indian origin and accounted for about 60% health care delivery in general and 75% of rural Indian population depends on these traditional system. These two system of medicine use plants, minerals, metals and animals as source of drugs, plants being the major source. It is estimated that roughly 1500 plant species in Ayurveda and 1200 plant species in Siddha have been used for drug preparation (Jain, 1987). In Indian folk medicine use, about 7500 plant species are recorded as medicinal plants (Anonymous, 1996). Though the Indian traditional system of medicine are time-tested and practiced successfully from time immemorial, there is lack of standardization with regard to identity of crude drugs, methods of preparation and quality of finished products.

Sesbania grandiflora, Sesbania bispinosa and Sesbania cannabina In the present review we have congregated information pertaining to botanical, phytochemical, nutritional, traditional claims and resent studies. The trees has immense potential and appears to have a broad spectrum of activity on several ailment. Various parts of the plants have been used for antioxidant, antidiarrhoeal, dermal, wound healing, Antidiabetic, Antistress, anticonvulsive, antihepatotoxic, antiestrogenic and anthelmintic activities. Fresh plant samples were collected from different forest in Marathwada region during different season viz. summer, monsoon, and winter.

Detail morphological and studies of different organs of the four species were carried out. The histochemical test was performed to ascertain the presence of starch, tannin, fat, glucoside, saponins and alkaloids in fresh material. The results are tabulated.

The present work describe the comparative biochemical studies in terms of extractive percentage, ash, lipid, alkaloids, carbohydrates, protein.
1) Percentage determination of water soluble ash, and acid insoluble ash, extractive percentage in water, alcohol and ether was carried out in different plant parts. During the determination of ash value experiment all the plants i.e. *Sesbania grandiflora*, *Sesbania bispinosa* and *Sesbania cannabina* show solubility of ash is high in acid as compared to water at summer season in at summer season according to Table 6 and 7a,b,c, and Graph 2a,b,c.

2) In *Sesbania grandiflora* highest extractive percentage observed at in alcohol at summer season than in water at summer and than ether .In *Sesbania bispinosa* and *Sesbania cannabina* same as *Sesbania grandiflora* in summer season alcohol is dominant over than in water and ether ., According to Table 5a, 5b, 5c and graph 1a, 1b, 1c,

3) Quantitative estimation of carbohydrates, proteins, amino acids, lipid and total alkaloids in various plant parts. During the analysis of total sugar and total carbohydrates summer season is dominate over the other season as like above result leaves having highest accumulation of total carbohydrates in *Sesbania grandiflora*, *Sesbania bispinosa* and *Sesbania cannabina* wood having highest accumulation of carbohydrates .according to table 9a,b and, c and graph 5 a, b, and c .

4) During analysis of protein and amino acid in *Sesbania grandiflora*, *Sesbania bispinosa* and *Sesbania cannabina* and Plant shows that leaves having high amount protein higher accumulation of protein and amino acids from table 10 a, b, c and graph 6a,b ,c.

5) During the estimation of secondary metabolites i.e. Lipid and alkaloids shows highest accumulation in Leaves at summer season than the other parts and other season as reference to table 8a,b and c, and graph 4a,b, and c.

6) Determination of total chlorophyll in the leaves of above four species during various seasons has been estimated as table (11) and graph (7) summer season are favorable for high amount of chlorophyll pigment accumulation i.e. Chlorophyll a, Chlorophyll b and carotenoids.
CONCLUSION

Thus the present experiment concluded that changes in extractive percentage, ash value, carbohydrates, lipid, alkaloids, protein and amino acid at the different season. During the summer, after the period of maximum growth had occurred and with high solar radiation during time, make for optimal photosynthesis condition. This process may well lead to an increase in primary and secondary metabolites in plants. It could be that the annual change in content are dependent on the different environmental condition obtain.

The result of our experiment work would be indicative of the seasonal pattern in the concentration of the estimated biochemical constituents, which would turn explain their functional importance in plant growth and metabolism and for the difference in yield and yield quality during different times of the years.

The seasonal environment being variable in both time and space makes difficult to predict responses of plant to the condition of the environment. Physiological plasticity enable plants to with stands such seasonal fluctuation within the limit of tolerance. Biochemical constituents and enzyme activities serves as important indices plant response and behaviors to seasonal variation as evidence by our work.

Scope and Feature:-

1) Research on agronomy of medicinal plants to lower the cost of production.
2) Phytochemical of indigenous medicinal plants
3) Analysis of medical properties of indigenous medicinal plant.
4) Research on the ex-situ and in-situ conservation of medicinal plant
5) Control the diseases.
6) Plants used in the local Ayurveda system have also been botanically described in well-illustrated.
7) Use of plant parts as a medicine at a particular season
8) Conservation and sustainable use of medicinal plants.
9) Study of quantitative biochemical composition of medicinal plant that locally used for curing diseases.
10) The wealth of tribal knowledge on medicinal plant points to great potential for research and discovery of new drug to fight diseases including diabetes, obtain new foods and other new uses.

11) It is better start investigation the efficiency of the medicinal plant based on the traditional healthcare practices by indigenous people.

12) Proper documentation of medicinal plant and to know their potential for improvement of health and hygiene through an eco friendly system. However due to population explosion, increasing urbanization and continuous over exploitation of the herbal reserves, the natural resources along with their traditional knowledge are depleting with an alarming rate. Therefore, there is an urgent need to document the indigenous knowledge of useful plants and their therapeutic uses before they are lost forever from community.