

## Economic Importance of Lichens. 21(4)

Lichens are cosmopolitan in distribution, growing from polar regions to equator in a variety of situations, except near smoky areas. Majority of lichens were found growing on decaying wood and undisturbed soil. Tree bark supports an extensive flora of lichens. The economic importance of this group of plants can be discussed under following heads:-

- Pioneers of vegetation: Lichens, particularly the crustose ones, are known as the pioneers on naked rocks. Crustose lichens are followed by foliose and fruticose lichens. During their development they bring about disintegration of the rock. This helps in building up of soil layers on which develop further stages of vegetation in succession.
- Medicines and poisons: The lichen in general have great significance in medicines and various other related industries. Many lichens have been put to medicinal use in the treatment of some important diseases in man. *Usnea barbata* for strengthening hairs and uterine ailments, *Xanthoria parietina* for jaundice. *Peltigera canina* commonly known as dog-lichen was used against hydrophobia. Many other forms were used to control fevers, diarrhoea, skin diseases, convulsions and as purgatives. Lichens also produce various types of acids. Pimaric acid produced by *Cetraria juniperina* is used to poison wolves. Many other poisonous substances like selenium, beryllium and chlorine are produced respectively by *Parmelia molluscula* etc.
- Industrial uses: In Sweden and Russia, alcohol is produced from lichens, because they contain plenty of lichen, Tanning is possible because of the astringent property of lichen, *U. laudica* and *Lobaria pulmonaria*. Members of the family, *Orcin* and *Carbonic acid*. Brown, yellow, blue and red dyes are also obtained from lichens. Lichens are useful in the preparation of cosmetic articles and various kinds of perfumery goods. Species of *Evernia* and *Romalina* yield essential oils which are used variously in soap industry.
- As food and fodder: The lichens serve as an important source of food for the invertebrates like mites, caterpillars, termites, snails and slugs. Lichens as food, have been used by man in various ways because they contain polysaccharides, certain enzyme and some vitamins. Boiled with water it yields jelly, which can be dried, powdered and then made into bread. Species of *Parmelia* are used as curry powder in India. Lichens have also served as fodder for animals, chiefly for reindeer in the Tundra. *Cladonia* spp., *Cetraria* & *U. laudica*, etc are commonly known as the reindeer lichens. These are fed to cattle and ponies.