

Abstract and Introduction

Seabuckthorn (*Hippophae L.*), a deciduous shrub or tree is widely distributed in the temperate zones of Asia and Europe and in the subtropical zone of Asia at high altitudes. Its berries are rich in nutrients and bioactive substances such as sugar, organic acid, and Vitamins. The Vitamin C content is 5-100 times higher than any fruit or vegetable known.

Growing at altitudes from 60-5,200m, *Hippophae* can resist low temperatures of minus 60°C and does not wither under the summer heat of 40°C. Some species can grow well in regions that only have a precipitation of 300mm and some species can endure inundation. Some species grow in pH 9.5 and soils which contain 1.1 per cent salts.

Hippophae is capable of fixing atmospheric nitrogen. The extensive root system controls soil erosion besides secreting some acidic compounds to improve alkaline soils.

Seabuckthorn can be propagated by both bisexual and asexual means. On good soil it often forms mass bushes on the slopes of a hill or along the banks of rivers. With luxuriant foliage and a strong root system it can retain the surface run-off and prevent the erosion of soil by wind and water.

Seabuckthorn is a source of fire wood. On testing, it was found that the calorific value of the wood is more than 4,000 Kcal/kg.

Resources of *Hippophae* are abundant in the Hindu Kush-Himalayas. According to the taxonomic listing, there are four species and four subspecies in this Region and another five subspecies are in Eurasia. It is considered that the Hindu Kush-Himalayas, and in particular the Qinghai-Tibetan Plateau, are the main areas of distribution and origin for this genus.

According to statistics, the total natural seabuckthorn area in China is 670,000 ha of which 49,000 ha are scattered in the Eastern Himalayas (including East Tibet, West Sichuan, and North-West Yunnan). A recent survey estimated that about 22,000 tons of seabuckthorn berries lie hidden and unutilised in the Eastern Himalayas of China alone.

Seabuckthorn berries are collected from natural forests. Because of the number of thorns on the stems or branches, some farmers sell the trees rather than pick the berries. Such methods damage seabuckthorn resources.

In the Eastern Himalayas, especially in Eastern Tibet and Western Sichuan, most seabuckthorn resources are far away from transportation lines and cities, so only some seabuckthorn resources are used commercially.

In order to develop the permanent and stable use of seabuckthorn resources, the Chinese Government has established a series of policies. The focus of the policies is on protecting resources and setting up new plantations.

China is further establishing vast shelter-forests of *Hippophae* in the Northeast, the North, and the Northwest.

Seabuckthorn has enabled farmers living in the mountains to earn good incomes. Many processing factories have been established. Since 1985, in the middle reaches of the Yellow River, the farmers have been earning more than 1.06 million U.S. dollars from seabuckthorn fruits every year.

To sum up, seabuckthorn is a new horticultural crop with tremendous potential. It is, and will be, playing an important role in improving the economic conditions of mountain farmers and sustaining stable development in mountain regions. There are rich resources of *Hippophae* in the Hindu Kush-Himalayan Region.