to bring this plant under mass cultivation in Ladakh to harness its full medicinal potential (Chaurasia et al. 2008).

The conditions of the temperate and subalpine regions are most suited for the cultivation of *Inula* species. In Ladakh, *Inula* is easily propagated by seeds as well as rootstocks. For the seeds of *Inula*, chilling treatment is essential for overcoming dormancy. The seeds are sown in the month of November in polyhouse, and germination begins in March. The fruits (*achenes*) mature in winter and can be collected by the end of cold season (March–April) at high hills. *Inula* roots are ready for harvest after about two to three years and they are usually harvested during October to November, or in March in the Ladakh region (Chaurasia et al. 2008). The rootstock and roots should be separated from the aerial portion, chopped into small pieces and allowed to dry in shade.

12.5.1 Biochemical Compositions

This plant is an excellent source of bioactive compounds that have health-promoting properties like alantolactone, isoalantolactone and several other important bioactive constituents (Chaurasia et al. 2008). The bioactive compounds present in the roots of *Inula racemosa* include Inulin, alantolactone, β-sitosterol, isoalantolactone, sesquiterpene lactones, dihydroalantolactone, dihydroisoalantolactone, sitisterol, daucosterol, inunolide, aplotaxene, phenylacetonitrile, isoinunal and glucosides (Raj et al. 2010; Gairola et al. 2014).

12.5.2 Medicinal Properties

Inula is a resilient plant that has multiple uses in the Amchi system of medicine, which makes it an ideal plant for commercial exploitation. It has been used for the treatment of several diseases in traditional medicine in various countries throughout the world. This plant is constituent of several Indian traditional system of medicine like Ayurveda, Siddha, Unani and Amchi (Chaurasia et al. 2008). *Inula racemosa* has been used as traditional medicine in East Asia and Europe. In China, it has been prescribed for abdominal pain, acute enteritis and bacillary dysentery, while Native Americans used this plant for the treatment of tuberculosis (Gairola et al. 2014). It is also known to be quite effective against acidity, gastrointestinal complaints and rheumatism (Angemo et al. 2012), and it also possesses anthelmintic, aphrodisiac and diuretic properties (Tantray et al. 2009).

It can be prescribed in combination with *Guggul* (*Commiphora mukul*) for curing myocardial ischemia. Roots are also used in chronic bronchitis when mixed with half of the amount with *Kuth* (*Saussuria lappa*). It has been used as anthelmintic for children and also as an antiseptic, expectorant and diuretic. Dried rhizomes and roots are used to cure in gastrointestinal troubles and rheumatism (Chaurasia et al., 2008). It has been used as an anthelmintic, antiseptic, expectorant and diuretic (Kumar et al. 2011). Though the cultivation practices of *Inula* were standardized at several locations, the quality and quantity of its bioactive compounds in different valleys in Ladakh under wild and cultivable land have not yet been reported. Standardization related to quality and quantity of bioactive compounds, like