

a nutritious by-product and useful in treating diarrhoea, dysentery, chronic fever, leucorrhoea, etc. (Warghat et al. 2009, 2013).

The enormous medicinal potential of *Dactylorhiza* has not been tapped to its full extent till today. Using different mass-spectroscopy methods, the availability of different chemical compounds with high medicinal values should be explored. The standardization of agro-technologies and the development of high-yielding cultivars through conventional breeding methods is also an area left unattended. The efficient use of different DNA markers for characterization will further help the breeding program for exploitation of important medicinal compounds and other agronomical traits (Murkute et al. 2011; Warghat et al. 2013). Due to the overexploitation of one of the critically endangered plants, there is a need to focus on conservation, upgradation and sustainable utilization of this wonder plant (Murkute et al. 2011).

12.5 *INULA RACEMOSA* H.L.

Inula racemosa H.L. (Asteraceae) (Figure 12.4) is a high-value, unconventional medicinal plant of Ladakh region and is locally known as *Manu*. It grows as a wild plant in temperate areas of India viz. Kashmir, Himachal Pradesh and Uttarakhand. In the Ladakh region, it is mainly cultivated in the Leh valley, Nubra valley, Zanskar valley, Suru valley and Kargil up to 3800 m altitude above mean sea level (AMSL). It is a perennial herb up to 1.5 m tall with fragrant, prominent roots and rootstock. The stems are numerous, ascending from the base of the rootstock. The leaves are leathery, rough above and densely hairy below, 25–50 cm long and 10–12 cm wide, and its shape is elliptic–lanceolate. The flower heads are yellowish in colour, have bisexual florets and occur in terminal racemes. In Ladakh, flowering usually occurs from January to July and fruiting in October to November. Fruits (*achenes*) are slender and about 0.5 cm long. There is urgent need



FIGURE 12.4 *Inula racemosa* at flowering and fruiting.