

Project Update: November 2016

Data collection for autumn season was done in the study area of Lingzhi from 2nd November to 21st November 2016 in the altitude range of 3500 – 5000 m asl after conducting necessary stakeholder workshop. From the fourth day of the trek to Lingzhi encountered the marvellous critically endangered *Nardostachys jatamansi* distributed along the famous pass Nyele la (pass between Paro and Lingzhi) located at an altitude of 4890 m asl. After inventories to the villages of Zamithang, Panglo, Mitseyuel, Gangyuel and Chebisa, the most favored study site was found to be in and around the Lingzhi Dzong (fortress) which includes Zamithang, Panglo and Mitseyuel villages.



Figure 1: *N. jatamansi*: Top left, top right and bottom left - Distribution in the study site near Lingzhi Dzong (shown in the background), bottom right - A sample of uprooted plant for laboratory biomass analysis.

Animals grazing in the habitat of *N. jatamansi* were found to be yaks, horses, mules and blue sheep with majority being the yaks. The plant associates found are *Bistorta macrophylla*, *Gentiana urnula*, *Morina nepalensis*, *Pedicularis flagellaris*, *Dactylorhiza hatagirea*, *Pterocarpus hookeri*, *Onosma hookeri*, *Rhododendron anthopogon*, *R. setosum* and *Cassiope fastigiata*. However, some species are yet to identify. Autumn vegetation was a little hurdle to the data obtained, though it can be brought too much improvement in summer field study with entire plants in bloom. Collected plant and soil samples were brought to the laboratory at proper time for analysis which was authenticated with the immediate laboratory services.

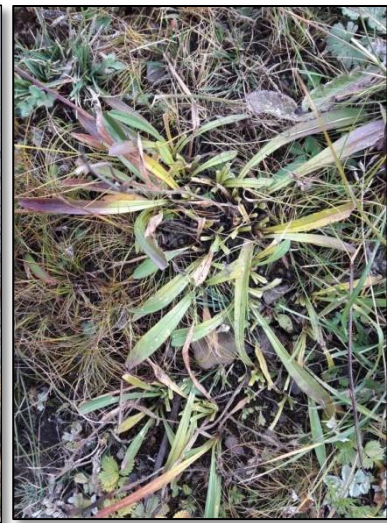


Figure 2: Top left- Yaks grazing on site, Top right- Horses and mules grazing on site, Bottom left- Blue sheep grazing on site & Bottom right- Grazed jatamansi.



Figure 3: Laying of: Left- Transect and Right- Quadrats during field assessment.

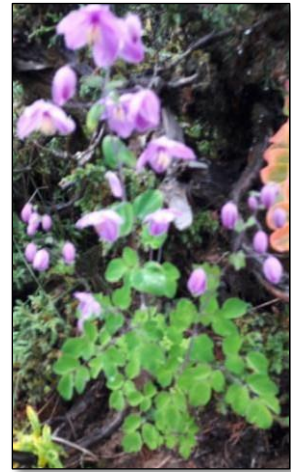


Figure 4: Some identified (Top left- *R. anthopogon* and *R. setosum*) and unidentified plant associates of *N. jatamansi*.