

Phenology Characters of Dominant Plants in the Nam Co Basin and Its Response to Climate Tibet

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Abstract: Ten dominant plants of alpine meadow in the Nam Co basin were selected to observe their phenological features during 2007 and 2008. The earliest flowering occurred in the mid-May and the maximum flowering period happened from the mid-June to late July for the majority of plants, then the flowering ended in the late September. The suitable air temperature for plant flowering ranged from 8.5 °C to 8.9 °C. Plant fruiting began in the early June, and fruiting period was coherent with flowering period for most of plants. The general features of phenology in the high elevations with low air temperature were observed in the Nam Co basin, which are characterized by short growing seasons (around 5 months), early and late flowering. Rainy season onset was earlier in 2008 than that in 2007, which caused plant flowering onset was 20 days earlier, and flowering and fruiting periods were shortening around 5 days in 2008 than those in 2007. Annual changes in phenology are sensitive to climate variability, especially the seasonality of precipitation.

Key words: phenology, climate, alpine meadow, Nam Co, Tibetan Plateau

封面照片说明: 马尔康

马尔康县位于川西北高原南缘高山峡谷地带, 山原约占面积 65%, 高山峡谷约占 35%; 气候特点夏凉冬冷, 四季分明; 为川西北交通、贸易中心; 面积 6 632.7 km², 人口约 6 万, 为藏族聚居区。“马尔康”藏语意为火苗旺盛的地方, 曾为校磨、卓克基、松岗、党坝四土司辖地, 1958 年成为阿坝藏族羌族自治州人民政府所在地。马尔康县境内有国家重点文物保护单位卓克基土司官寨、直波碉群, 是以嘉绒藏族民俗风情为特色的旅游胜地。

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