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### Comparison of Growth and Grain Yield of Spring Wheat in Lhasa, the Tibetan Plateau, with those in Sapporo, Japan

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**Abstract:** The Tibetan Plateau is one of the highest cultivated regions in the world. The objective of the present study was to compare wheat growth and grain yield in the high altitude region with those in a low altitude region. Two spring wheat cultivars were grown for two years at an experimental field in Lhasa (29°N, 3688 m above sea level) in the Tibetan Plateau in 2001 and 2003, and in Sapporo (43°N, 15 m above sea level), Japan in 2002 and 2003. In Lhasa, temperature throughout the growth period was lower and photoperiod before heading was shorter than in Sapporo. There was no significant difference in grain yield between Lhasa and Sapporo. Dry matter production was higher in Lhasa than in Sapporo. The crop growth rate before heading was similar in both locations, but the time to heading was 15 days longer in Lhasa than in Sapporo. Leaf senescence was more decelerated in Lhasa than in Sapporo. These results suggested that high dry matter production in Lhasa was mainly due to the longer growth period.

**Keywords:** [Dry matter production](#), [Grain yield](#), [Temperature](#), [Tibetan Plateau](#), [Triticum aestivum L.](#), [Wheat](#)

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