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# 气候变化背景下中国农业气候资源变化Ⅴ. 宁夏农业气候资源变化特征

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## Changes of China agricultural climate resources under the background of climate change. Ⅴ. Change characteristics of agricultural climate resources in Ningxia.

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**摘要**

基于1961—2009年宁夏21个气象站点的气象资料，分析了宁夏各区农业气候资源的时空变化趋势.结果表明：研究期间，宁夏各地气温逐渐升高，呈北高南低的空间分布特征，年均气温的气候倾向率为0.4 ℃·(10 a)$^{-1}$；大部分地区年降水量呈逐渐减少趋势，年降水量的气候倾向率为4.26 mm·(10 a)$^{-1}$；无霜期和作物生长季天数随着气候变暖逐渐延长；≥10 ℃积温在3200 ℃·d以上的区域向南扩展，宁夏适宜种植中晚熟水稻的区域有所扩大；2001—2009年，宁夏大部分地区适宜种植冬小麦，全区各地几乎都适宜种植春小麦；宁夏南部山区各地7月平均气温≤20 ℃的区域面积逐渐缩小，适宜种植马铃薯的地域也随之缩小.

**关键词：** 宁夏 农业气候资源 气候倾向率 气候变化

Abstract:

Based on the 1961-2009 weather data from 21 meteorological stations in Ningxia, this paper analyzed the spatiotemporal variation trend of regional agricultural climate resources in Ningxia, Northwest China. In 1961-2009, the air temperature in Ningxia increased gradually from south to north, with the mean annual temperature increased by 0.4 ℃·(10 a)$^{-1}$, while the annual precipitation in most regions decreased gradually, with a decrement 4.26 mm·(10 a)$^{-1}$. Both the frost-free period and the duration of crop growth season prolonged. The regions with ≥10 ℃ accumulated temperature being ≥3200 ℃·d extended southwardly, and thereby, the regions adaptive for planting mid and late rice increased. In 2001-2009, most regions were adaptive for plating winter wheat, and the whole Ningxia was adaptive for plating spring wheat. In the southern mountain regions, the region with mean temperature in July being ≤20 ℃ decreased gradually, and accordingly, the regions adaptive for planting potato decreased.

Key words: Ningxia agricultural climate resources climate trend rate climate change



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