Study on the changes in farming calendar of winter wheat in North China Plain

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Variation of farming calendar needs to be considered in global warming. Except rice, as the second crop, there are large cultivation areas and production amounts of wheat in China. North China Plain is one of the main wheat produce base. In this study, the objectives are to clarify variation of farming calendar, crop acreage of winter wheat and changes reasons using satellite remote sensing data in North China Plain. As results, from PAL and SPOT/VEGETATION NVDI data, variation of farming calendar and annual crop acreage changes of winter wheat are cleared from 1982 to 2012. Sowing season is delayed owing to autumn mean temperature, precipitation and breed improvement. And then temperature change in autumn got impact on the winter wheat which sowing in September, make them grow too fast can not against the cold in winter. And because of that , winter wheat can not grow well in green up time. It agrees with previous research results. Green seasons become faster as the increasing temperature in spring. In addition, crop acreage changes correspond to statistical data, and spatial and temporal distribution of winter wheat is also cleared.

Keywords: North China Plain, farming calendar, winter wheat