

Study on water footprint of major crops in reclamation area of Heilongjiang

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The serious shortage of water resources in China is of great importance to improve the utilization efficiency of water resources. Heilongjiang reclamation area is an important food base in China, which has problems such as low efficiency and unreasonable water supply structure. This paper A Idaya Llam as (2008) on food production and the algorithm of virtual water, using the penmen formula and CROPWAT software, calculated the heilongjiang province nine branch of spring wheat, soybean, corn, rice production water footprint, analyzes the characteristics and the space and time the following main conclusions: 1) crop production mainly by sowing area, irrigation water footprint and weather conditions of the comprehensive effect. The four main crops in the heilongjiang reclamation area are ranked as rice, soybean, corn and spring wheat according to the production water footprint. 2) the water footprint of the main crops in heilongjiang reclamation area has an absolute advantage. During the dry years, the precipitation decreases and the green water footprint decreases, which is most reflected in corn, soybean and spring wheat. In the rainy years, the precipitation increases and the green water footprint increases accordingly, which is most reflected in rice. 3) crop production in heilongjiang province each bureau water footprint the trend of change over time and with the trend of crop planting area of similar, the spatial distribution has stable characteristics, highest sanjiang bureau, Harbin branch because planting area is the smallest, water footprint value is always the youngest, water footprint differences in different areas.