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Effects of Ottoman Rice Plantations in South-eastern European Landscape: Climate Change, Hydrology and Disease

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Humid weather conditions of the sixteenth century enabled the introduction of aqua crops to Southeastern European landscapes. The Ottoman government employed a group of experts for the cultivation of rice to implement and rehabilitate rice production. Rice plantations, as an anthropogenic intrusion in the region between Tigris to the Danube, had a fundamental social and environmental impact. Organization of human resources on a large scale; land reclamations, deforestation, and kilometres-long irrigation work changed the landscape, produced seasonal miasma and aquatic pests. Ottoman rice plantations transformed the Southeastern European socio-ecological landscapes in early modern times. Historical data about the Ottoman rice plantations open new insights for improving our knowledge about climate history, the history of riverbeds and the history of malaria in this landscape. The study presents a monography of the plantations with historical drawings and maps, showing the farms on river beds, delineates the responsiveness of the rice harvest to precipitation and temperature changes and maps the triggered aquatic pests due to climate change and deforestation. The presentation aims at opening a historical perspective to today's questions on climate change, hydrology and vector caused diseases.