Chinese Chestnut, A Nut Crop Tree for Eastern Kansas

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The Chinese chestnut (*Castanea mollissima* Blume) industry in the United States is in its infancy. The Natural Resources Conservation Service Manhattan Plant Materials Center's (PMC) wanted to determine growth potential and nut production of Chinese chestnut trees grown under a non-irrigated, low-maintenance management system in eastern Kansas. In 1975, the PMC planted 55 seedling trees at its site south of Manhattan, Kansas. The PMC maintained the planting under a low level of management with no fertilization or supplemental irrigation and only occasional tillage and pruning. The PMC staff collected data at about 20 years and 35 years on tree condition, tree size, and nut yields. In 2010, the condition of the trees rated fair with some disease and no insect problems observed. The size of the trees ranged from a mean tree height of 27.6 ft and a mean diameter at breast height of 12.9 inches. Nut yields ranged from poor to excellent among trees in the planting. Most trees ranked as very good nut producers at 20 years, but declined during the following 15 years. The nut mean yield of the trees ranged from 3,421 lbs/acre (three-year mean) at 20 to 25 years and 1,256 lbs/acre (five-year mean) at 33 to 35 years of age. Mature trees growing in Riley County, Kansas, have produced moderate yields of high quality nuts under a low level of management.