

Conservation Practice Standard Overview

Alley Cropping (311)

Alley cropping is an agroforestry practice where agricultural or horticultural crops are grown in the alleyways between widely spaced rows of woody plants. By combining annual and perennial crops that yield varied products and profits at different times, a landowner can more effectively use available space, time, and resources.



Practice Information

Alley cropping is used to enhance or diversify a farm enterprise by adding tree/shrub products, reduce surface water runoff and soil erosion, alter water table depths, improve utilization and reduce offsite movement of nutrients, modify the microclimate for improved crop production, provide habitat for wildlife and beneficial insects, enhance the aesthetics of the area, and increase net carbon storage.

Some common examples of alley cropping plantings include wheat, corn, soybeans, or hay planted between rows of black walnut or pecan trees. Nontraditional or value-added crops may also be incorporated for extra income. These may include sunflowers or medicinal herbs planted between rows of nut or fruit trees alternated with nursery stock trees or hazelnuts.

Alley cropping can be used for other purposes such as short rotation woody crops of fast growing woody species that are combined with forage or row crops to produce fuelwood and fodder. Plantings to enhance wildlife habitat can also be designed using appropriate plant species.

Common Associated Practices

Alley Cropping (311) is commonly applied with conservation practices such as Tree and Shrub Establishment (612), and Woody Residue Treatment (384).

For further information, contact your local NRCS field office.