INSECT POLLINATION IMPROVES YIELD OF SHEA

By Stout et al.

Pollinators are important for the production of crops and other plants of economic and cultural value across the world. Shea fruits are consumed by local people in the sub-Saharan drylands of West Africa, and the oil "shea butter" produced from the seeds is both an important source of dietary fat and cosmetics, and a key tradable commodity in this region. However, the habitats in which shea trees grow are heavily modified by human activity, threatening the insect pollinators that this tree depends on. In this study, across six sites in southern Burkina Faso and northern Ghana, we found that shea flowers were mostly visited by bees, both small social stingless bees and native honey bees. These bees were important for fruit set - more than twice as many fruit were produced by inflorescences visited by bees than those from which pollinators were excluded. We conclude that conservation and restoration of habitat to protect social bees is important to maintain pollination services to V. paradoxa and other fruitbearing trees and cultivated crops on which local livelihoods depend.

