



## Twelfth International Symposium on Pollination (ISPXII)



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### **SEAMS IN THE FOREST FABRIC: THE ROLE OF POLLINATORS IN SUPPORTING FOREST-DEPENDENT LIVELIHOODS**

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#### **ABSTRACT**

Animal pollination supports the production of most of the world's leading crops and wild plants and plays an integral role in the pollination of crops and products that supply essential nutrients to rural subsistence farming communities. Pollination services are, however, increasingly imperilled by habitat destruction, and while there is growing awareness of the importance and plight of pollinators in the West, there is still little evidence to show whether these concepts are recognised in developing regions. Information is required, firstly to assess the degree to which rural livelihoods are pollinator-reliant, and secondly to understand current perceptions and attitudes toward pollinators to inform appropriate awareness programs which can promote pollinator-friendly land-use. Pollinator exclusion experiments were conducted on two forest tree species that supply forest products to rural communities (*Julbernardia paniculata* and *Syzgium guineense*) in North-Western Zambia and findings reveal differing dependence on outcrossing facilitated by insect pollinators, and differences in the degree to which they were affected by pollen limitation. We assessed the impacts of forest loss on insect pollinators and investigated pollinator dependence of rural communities by conducting 574 household interviews, collecting information on crops and forest products being utilized. Attitudes towards insects and perceptions of insect pollinators and pollination were also recorded. Trends show that hymenopteran abundance was affected by forest cover. 79% of crops and forest products used were pollinator-dependent but understanding of pollination was limited and insects were generally disliked. This may have implications for land-use practices affecting pollinators and could be addressed by appropriate outreach initiatives.