The Worldwide Influence of the Wild Species, *A. cardenasii*, on the Peanut Crop

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Wild crop relatives are important sources of genetic diversity and new traits for crop plants. For peanut crop this is particularly important, because it has little DNA variation and few sources of resistance against many pests and pathogens. However, the use of wild species in peanut breeding has been hampered by sexual incompatibilities and differences in ploidy between the mostly diploid wild species and the tetraploid crop. Here we will present the latest results on our ongoing investigation into the impact of the wild species *A. cardenasii* on peanut cultivation worldwide. A. cardenasii is a wild species from Bolivia, with strong resistance to foliar diseases and root-knot nematode. At North Carolina State University in the 1970s there was an extensive research program involving hybridization of A. cardenasii with cultivated peanut. Selected lineages from these hybridizations were shared with ICRISAT, India. From where, they were distributed to breeders in at least 15 different countries on every continent, and extensively used to create cultivars. In the USA, some of the most resistant cultivars have segments of *A. cardenasii*. However, until now, the impact of these hybridizations and the actual genetic contribution of the wild species has been substantially obscure. This study exemplifies how, through free exchange of seeds, the benefits from a single wild species can be dispersed globally, to both subsistence and commercial farmers. The complex routes of exchange also highlight the unintended consequences of the Convention of Biological Diversity. Today, the complex legislation and restrictions resulting from implementation of the Convention would make this exchange and the sharing of benefits, impossible.