

B40 POSSIBILITY OF PRODUCING INTERSPECIFIC HYBRIDS IN THE GENUS
PSOPHOCARPUS

S.M.S.D. Ramanayake and Y.D.A. Senanayake
Winged Bean Institute, Pallekele

Nine species of the genus *Psophocarpus* are known to exist. Of these *P.tetra-*
gonolobus (L) DC., the winged bean is widely distributed in South and South-
East Asia whereas the other species are mostly confined to the African continent.
The Winged Bean Institute has in its collection over 400 accessions of winged
bean, as well as two other species, *P.scandens* (Endl.) and *P.palustris* (Desv.)

All these species are known to be self pollinating. No reports of any inter-
specific hybrids among them are known. Attempts are being made to study this
possibility by artificial hybridization. Over 7000 crosses of *P. tetragonolobus*
(L) D.C. x *P. scandens* (Endl.) and *P.palustris* (Desv.) have shown that pod set
is very low. Those that set abscise very early. Intraspecific hybridization
among some varieties of winged bean carried out at the same time had 7% pod
set and gave rise to true hybrids. Comparisons of flower and pod abscission
in the two indicate possible fertilization and early pod development in inter-
specific crosses. Barriers to crossing are being studied, so that their identi-
fication may help in producing interspecific hybrids.