Summary

Arachis pintoi CIAT 17434 has a high potential in the humid tropics of Latin America because of its widesprand utility both as a forage and as a ground cover. A geocarpic seed forming habit, however, poses a challenge to seed harvesting and supply. This paper summarizes experiences from both initial seed multiplication and field experiments at various locations in Colombia.

A high potential seed yield, approx. 5 t/ha, has been documented. Actual seed yields of 1-2 t/ha have been realized at several locations, at 14-18 months post planting with adequate fertilizer application and weed control. This indicates a multiplication rate comparable or superior to other tropical forage legumes. At harvest maturity over 90% of the potential seed yield is concentrated in the first 10 cm of the soil profile, and over 90% of these are detached. The basic harvesting strategy is therefore, to sift soil from pods to this depth. In the coffee zone, the accession CIAT 17434 showed higher seed yield than CIAT 18744 and CIAT 18748.

Manual harvesting attained the highest seed yields but with very high labour requirements. Partial mechanization, using rotary and flat screen field separators, recovered 80% of seed yield with 50% less labour and 15% reduction in germination, compared to the manual method.

Strategies for commercial seed production should emphasize the location of seed crops on light textured soils, preferably with moderate levels of fertility and organic matter, within regions with prolonged rainfall distribution. Additionally, seed areas should be associated with young perennial crops and harvested utilizing field screen separators. While small or large farmers can manage field areas, mechanical seed harvesting and conditioning, storage and marketing requirements will provide entry points for seed enterprises.