Efficiency of N fixation by legumes and the benefits and constraints in the use of inoculants are discussed with reference to *Centrosema pubescens, Phaseolus vulgaris,* white clover, soyabeans, peas, cowpeas, pigeon peas, *Leucaena leucocephala, Medicago* spp. and *Desmodium* spp. The role of the Rhizobium Microbiological Resources Centres (MIRCEN) set up by UNEP/UNESCO is described.