

abstract

This report combines several sequential milestones related to the recovery, characterization and effectiveness testing of rhizobial isolates by program partners. Originally cooperators were to bio-prospect a proscribed number of nodules and sites for isolation (MS 3.2.2) but this proved too rigid and was adjusted to "targets of opportunity", where large individual healthy plants bearing large nodules, native legumes and soil trapping were employed. A N2Africa data base was developed to formalize our collection (MS 3.1.3) and 1360 isolates entered, with another 84 to be entered, resulting in 72% of the original program target. The empirical, stepwise approach to strain selection was adopted that first evaluated large number of test isolates under rhizobium-free greenhouse conditions and systematically reduced them to a few, highly effective and competitive "elite" strains using potted soils and comparative field trials (MS 3.1.4). Several candidate elite strains (12) have emerged from several countries but their characterization remains incomplete, and a more systematic and detailed approach is recommended. To achieve this goal, the best strains should be consolidated and tested side-by-side. These best isolates are now available to interested parties outside of the program (MS 3.1.5).