## **List of Tables**

Table 1.1	Quorum sensing systems in rhizobia	22
Table 2.1	Bacterial strains used in Chapter 2	34
Table 2.2	Primer pairs used in Chapter 2 for PCR-detection of gene circuits	20
Table 2.3	N-acyl homoserine lactones detected from pigeon pea nodulating Ensifer	50
Table 2.4	Sequence similarities of QS gene homologues detected in the Ensifer isolates with reference seq.	58
Table 3.1	Bacterial stains and plasmids used in Chapter 3	70
Table 4.1	List of bacterial strains, plasmids and PCR primers used in the Chapter 4	100
Table 4.2	Composition of Hoagland's minimal Nitrogen free medium	105
Table 4.3	Spatiotemporal distribution pattern of Ensifer isolates coated on the germinated seeds of pigeon pea.	115
Table 4.4	Spatiotemporal distribution pattern of Ensifer sp. HP127 and Ensifer sp. HP113 when inoculated in soil at 10 <sup>4</sup> cfu/g of soil	116
Table 4.5	Root colonization dynamics of seedling-coated Ensifer sp. HP113 in the presence (Test) or absence (Control) of bulk inoculation of Ensifer HP127 at 10 <sup>4</sup> cfu/g of soil.	117
Table 4.6	Root Colonization dynamics of Ensifer sp. HP127 on the root when inoculated in soil at 10 <sup>4</sup> cfu/g of soil - in the presence (test) or absence (control) of seedling-coated Ensifer sp. HP113	118
Table 4.7	Root colonization dynamics of seedling-coated Ensifer sp. HP127 in the presence (Test) or absence (Control) of bulk inoculation of Ensifer HP113 at 10 <sup>4</sup> cfu/g of soil	119
Table 4.8	Colonization dynamics of Ensifer sp. HP113 on the root when inoculated in soil at 10 <sup>4</sup> cfu/g of soil in the presence (test) or absence (control) of Ensifer sp. HP127 as the root- coated strain.	120