

## **Growth Conditions for *R. tropici* CIAT 899 and *S. meliloti* 356, 370, 371**

### **Liquid Media**

50% Tryptic Soy Broth (TSB)\*

- 7.5g BD™ Tryptic Soy Broth (Soybean-Casein Digest Medium)
- add dH<sub>2</sub>O to 500mL

Lysogeny Broth Minimum (LB<sub>min</sub>)

- 2.5g NaCl
- 5g Tryptone
- 2.5g Yeast Extract
- add dH<sub>2</sub>O to 500mL

### **Solid Media**

50% Tryptic Soy Broth (TSB)

- 7.5g BD™ Tryptic Soy Broth (Soybean-Casein Digest Medium)
- 7.5g Agar
- add dH<sub>2</sub>O to 500mL

Lysogeny Broth (LB)

- 5g NaCl
- 5g Tryptone
- 2.5g Yeast Extract
- 7.5g Agar
- add dH<sub>2</sub>O to 500mL

**Incubate at 30°C.**

---

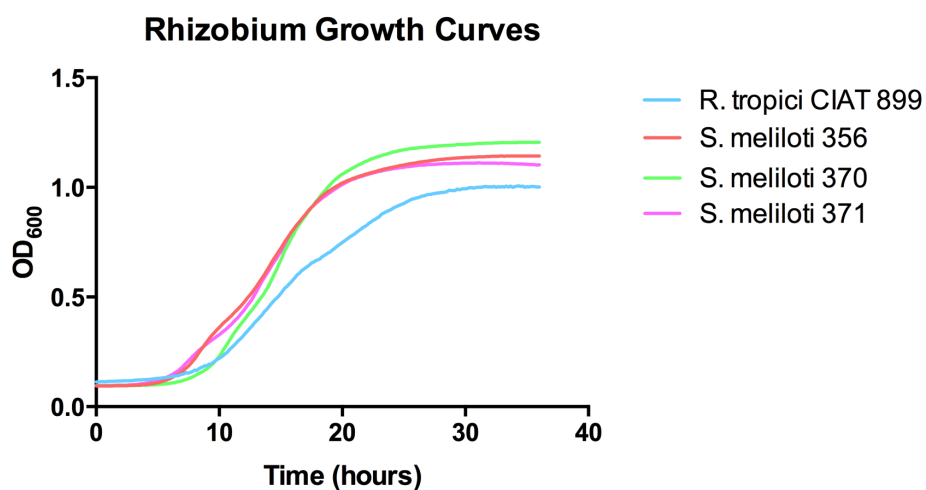
### **Additional Strain Information**

<b><i>Strains</i></b>	<b><i>Characteristics</i></b>
<i>Rhizobium tropici</i> CIAT 899	can tolerate high temperatures and high levels of acidity in culture, wide range of legume symbionts
<i>Sinorhizobium meliloti</i> 357	derivatives of <i>S. meliloti</i> 1021
<i>Sinorhizobium meliloti</i> 370	derivatives of <i>S. meliloti</i> 1021
<i>Sinorhizobium meliloti</i> 371	derivatives of <i>S. meliloti</i> 1021

### **Doubling times for rhizobia strains.**

<b>Strain</b>	<b>Doubling Time</b>
<i>R. tropici</i> CIAT 899	2.5 hours

<i>S. meliloti</i> 356	1.5 hours
<i>S. meliloti</i> 370	1.5 hours
<i>S. meliloti</i> 371	1.5 hours



Optical density at 600nm (OD<sub>600</sub>) of each Rhizobium strain, measured every 10 minutes for 36 hours.

**Innate resistances to commonly used lab antibiotics on solid and liquid media.**

Antibiotic	<i>R. tropici</i> CIAT 899		<i>S. meliloti</i> 356		<i>S. meliloti</i> 370		<i>S. meliloti</i> 371	
	Solid	Liquid	Solid	Liquid	Solid	Liquid	Solid	Liquid
Streptomycin	NO	NO	NO	YES	NO	YES	NO	YES
Carbenicillin	YES	NO	NO	NO	NO	NO	NO	YES
Kanamycin	NO	NO	NO	NO	NO	NO	NO	NO
Rifampicin	NO	NO	NO	NO	NO	NO	NO	NO
Spectomycin	YES	YES	NO	NO	NO	NO	YES	YES