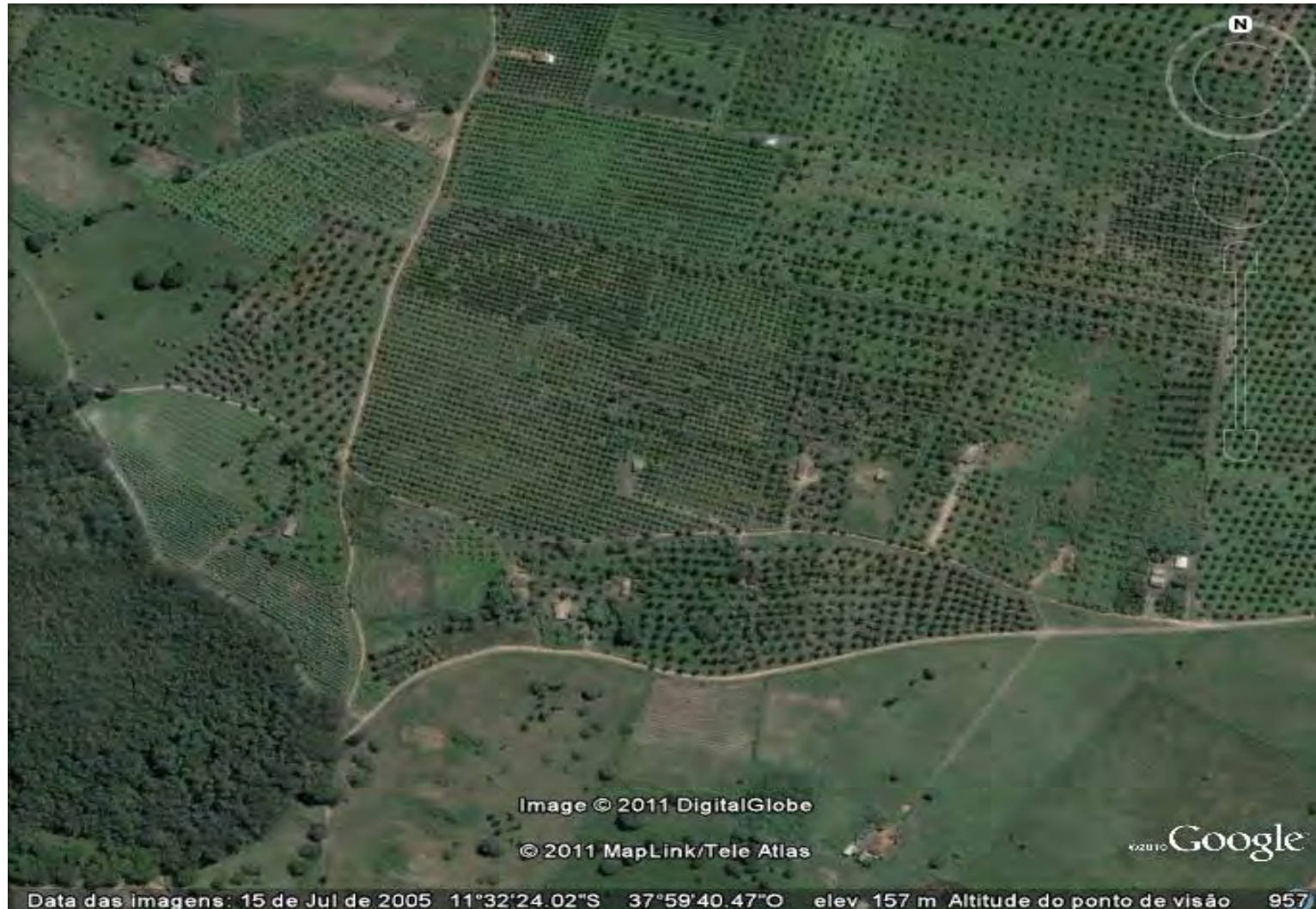


Complex landscape

*Multiple smallholder
family properties*

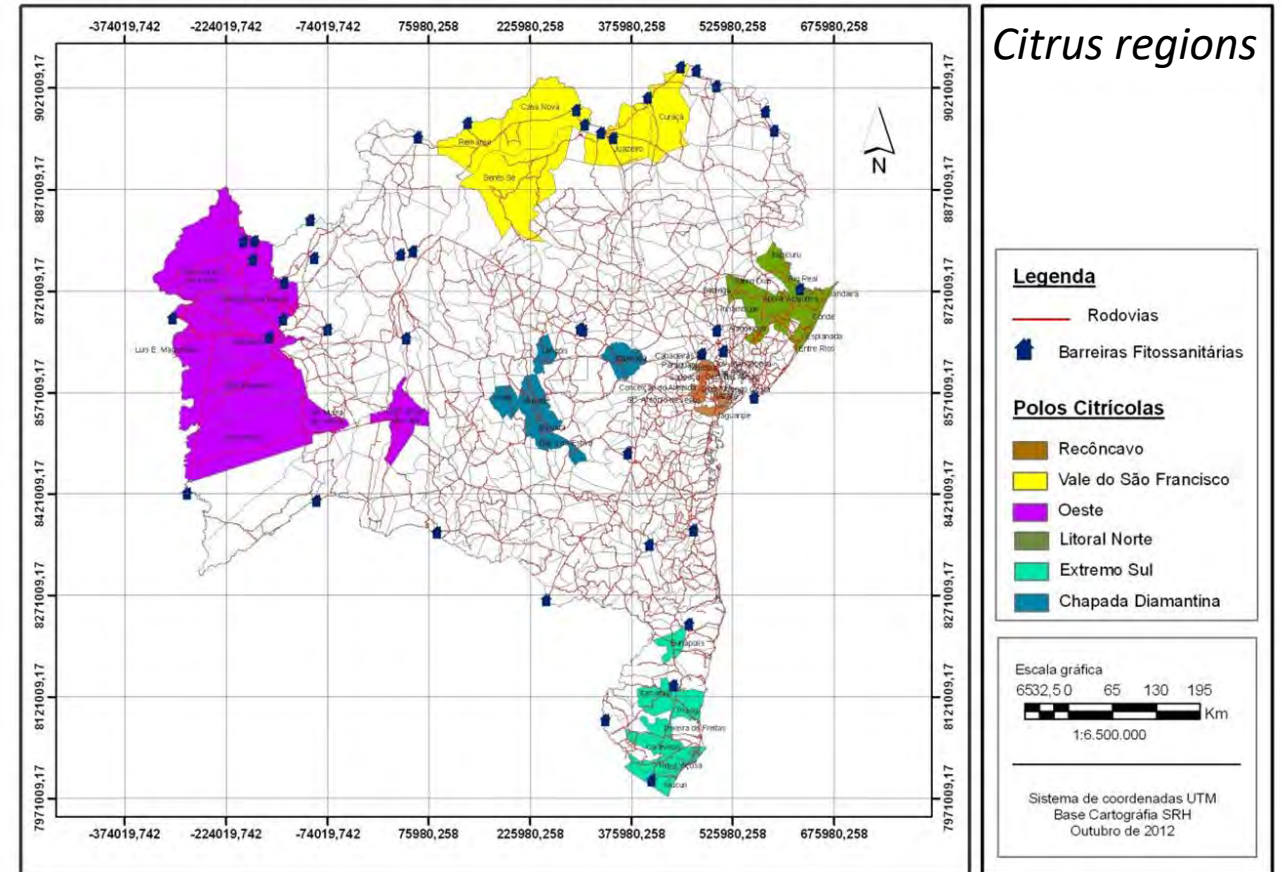


Low technological level

- Low plant health literacy
- Low access to credit



Bahia: an HLB-free region



Citrus regions in Bahia





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ARMs


Areas of Regional
Management

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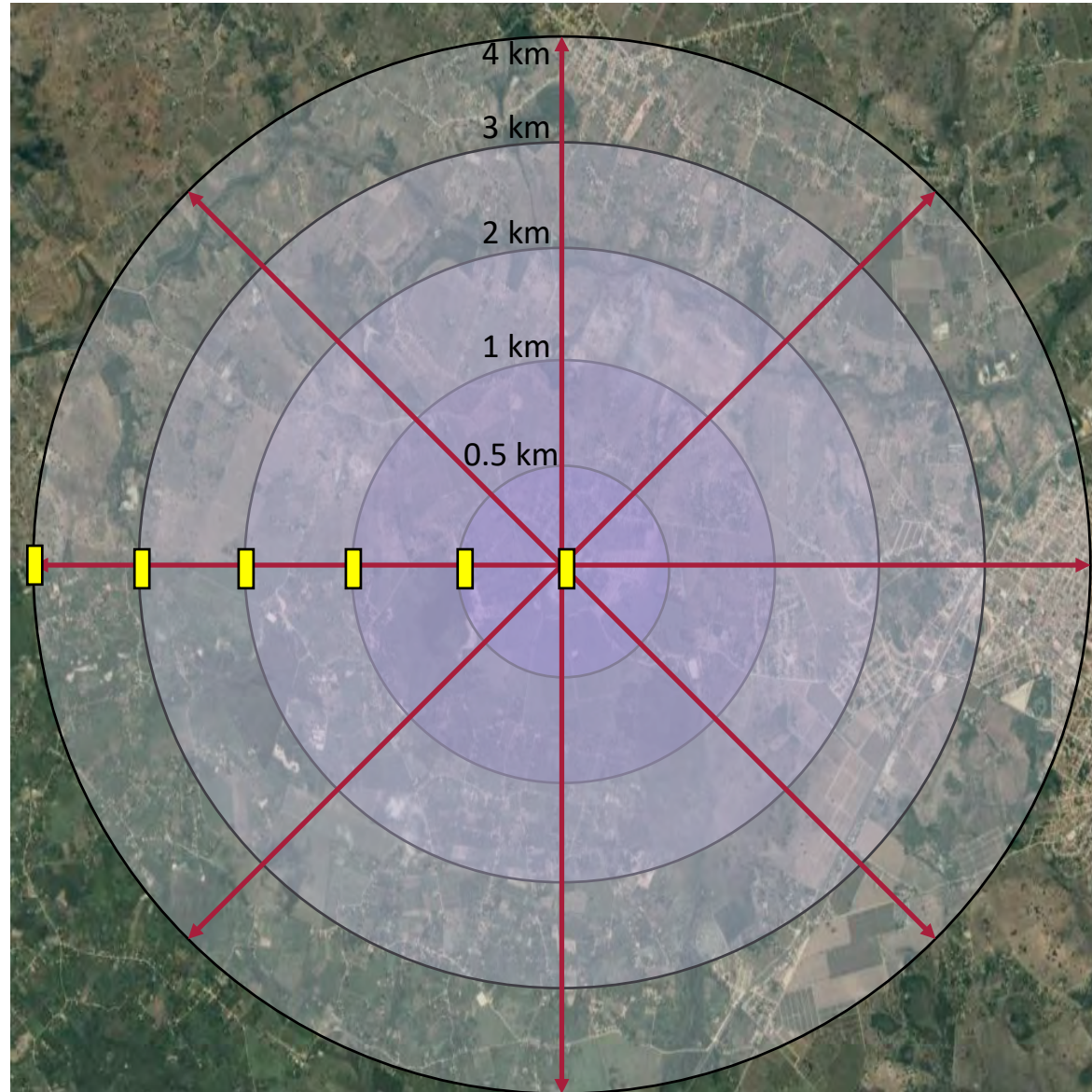
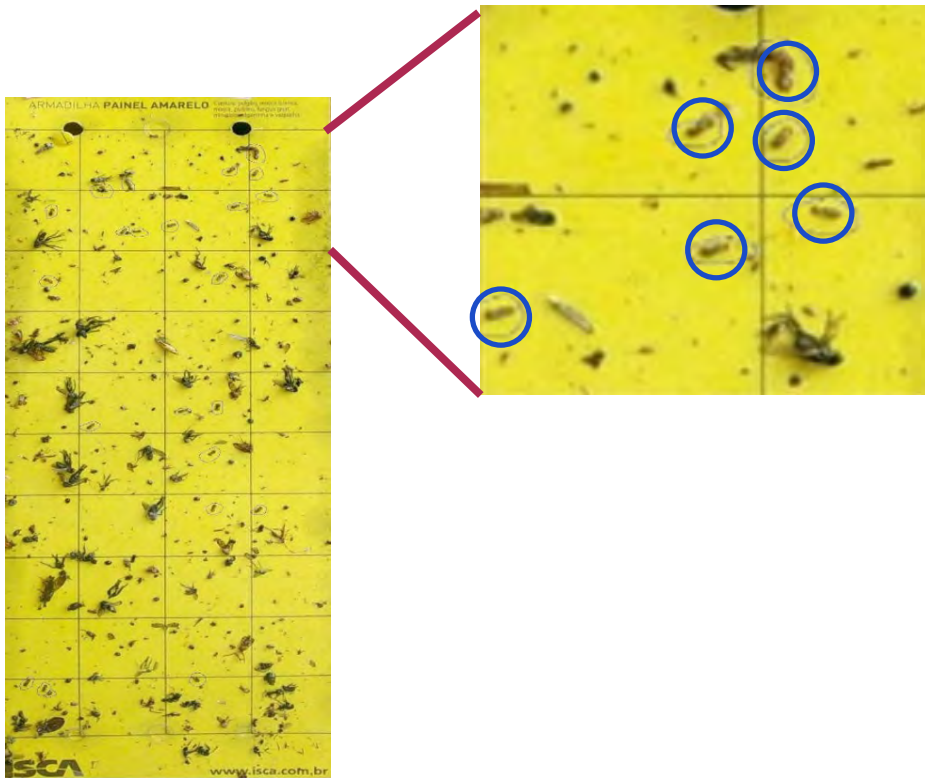


Embira ARM

Monitoring sites at interceptions 

Perimeter: 25.1 km

Area: 50.3 km²



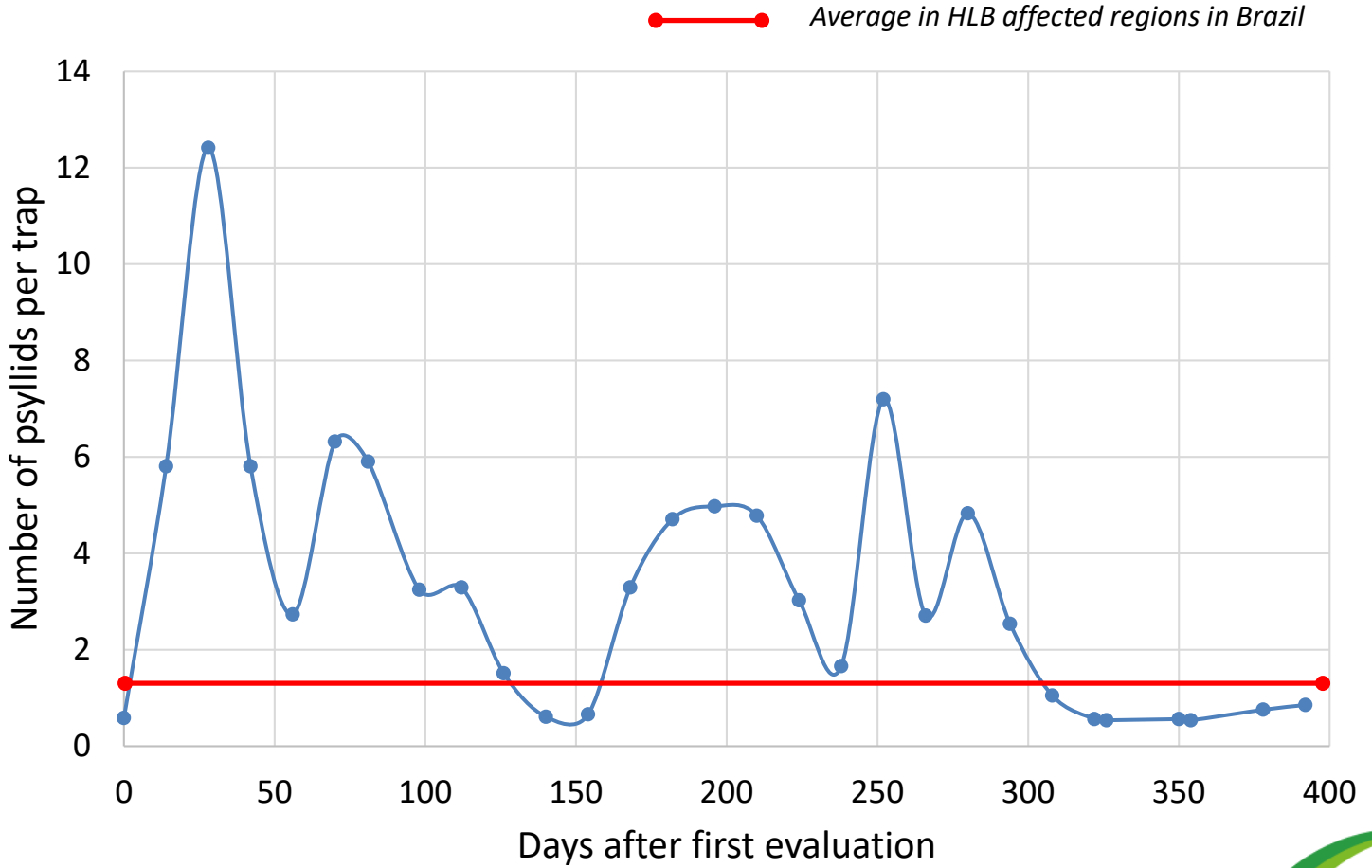
Vector Abundance

Very high psyllid populations
Higher in traps near urban areas

No Vector Control



Heatmap of trapped psyllid

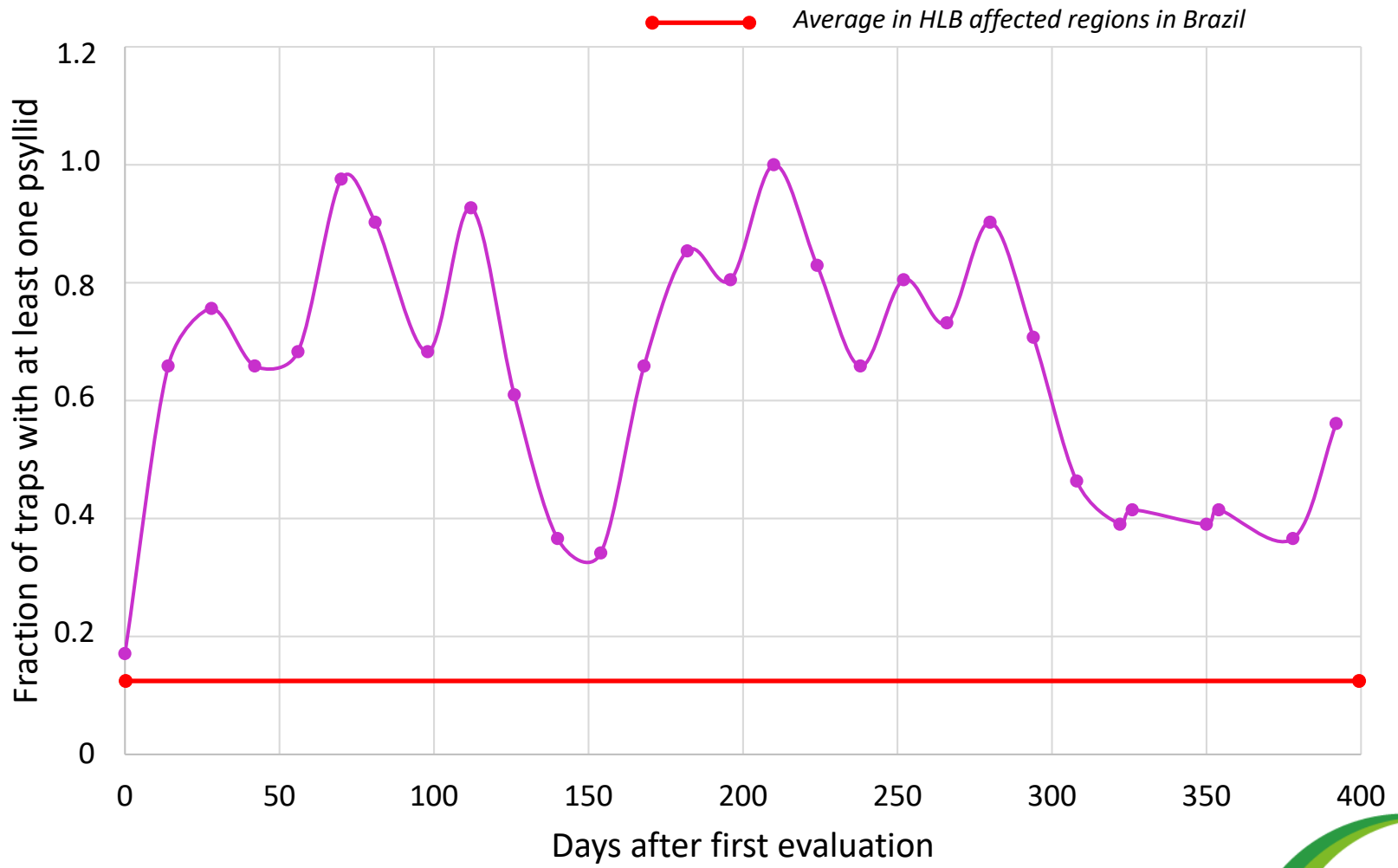


Vector Occupancy

Proportion of traps with at least one vector

Very high occupancy

No Vector Control





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Sentinel Routes

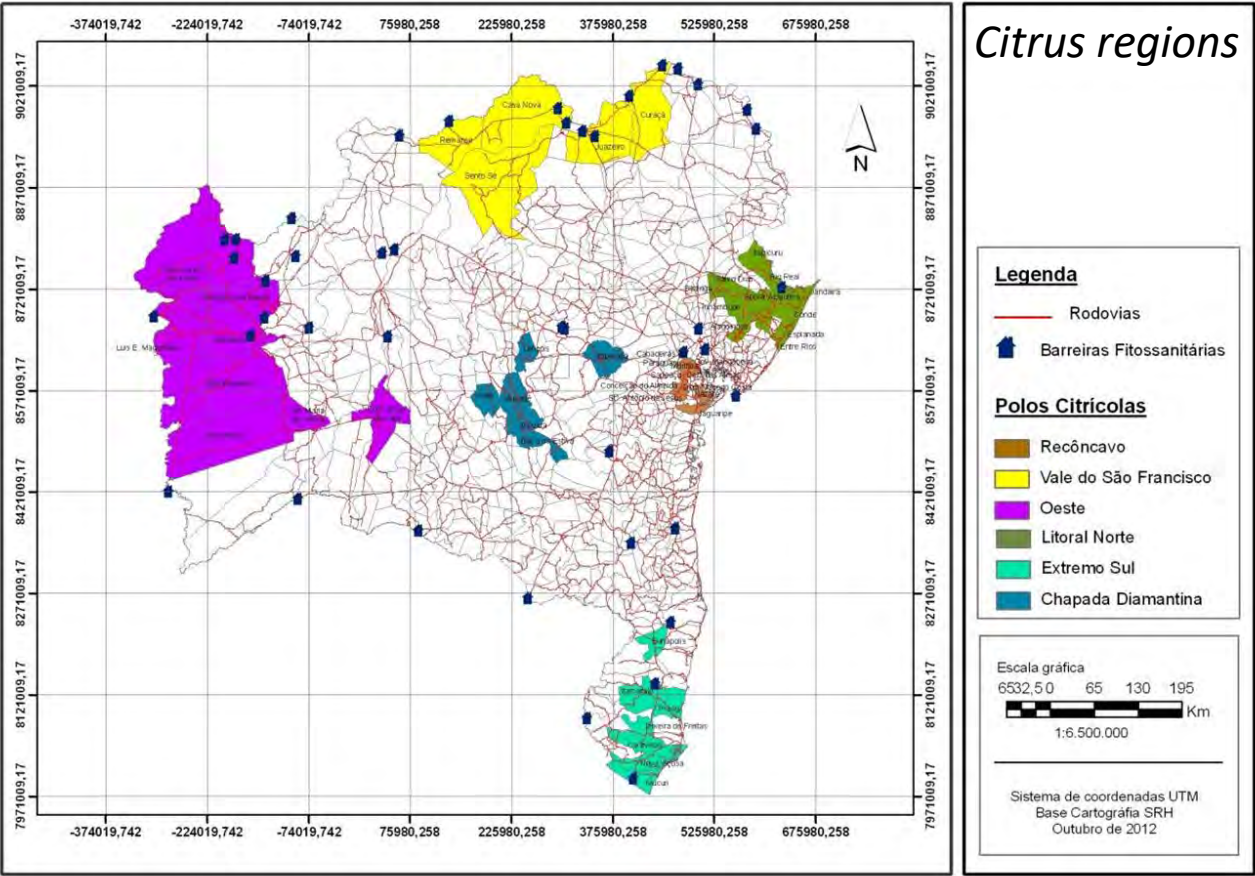
Transects for capturing and test HLB vectors

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Sentinel Routes in Bahia



Citrus regions in Bahia



— Sentinel Routes
— Control Routes



Sentinel Routes in Bahia



Chapada 2013: Clas negative in plants

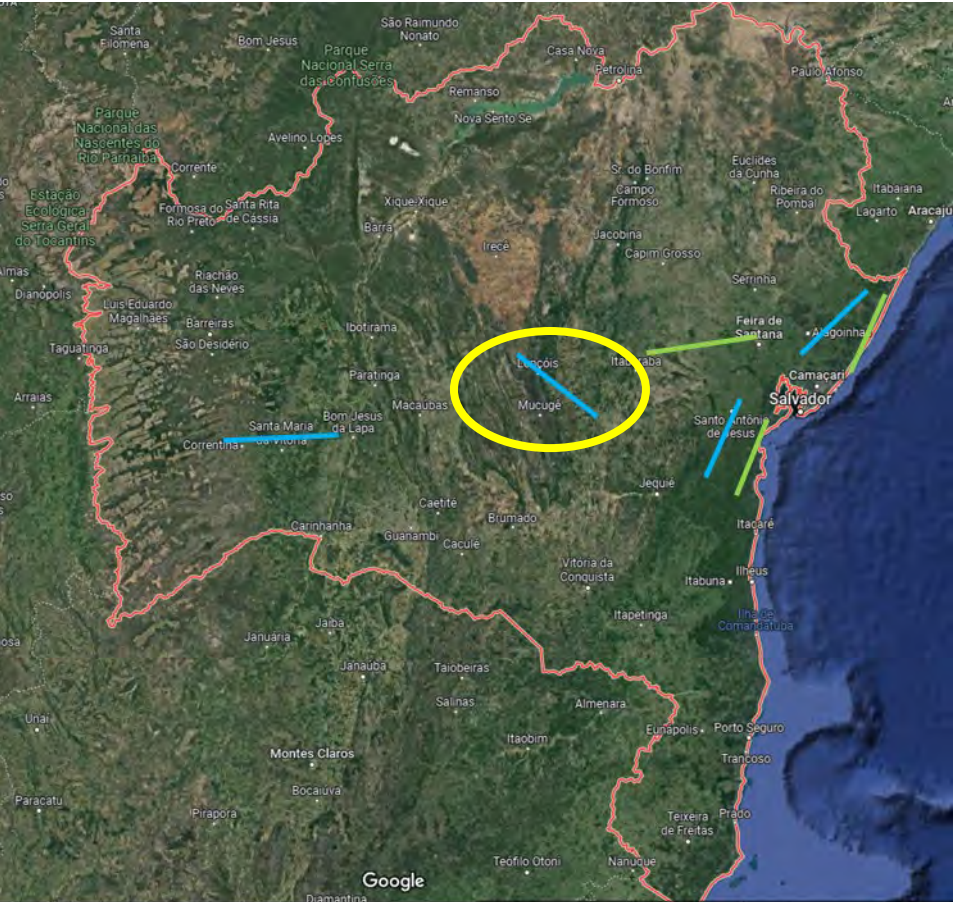


Surveillance perimeters



Eradication of *Citrus* and *Murraya* within the perimeters

Chapada 2018: negative for HLB

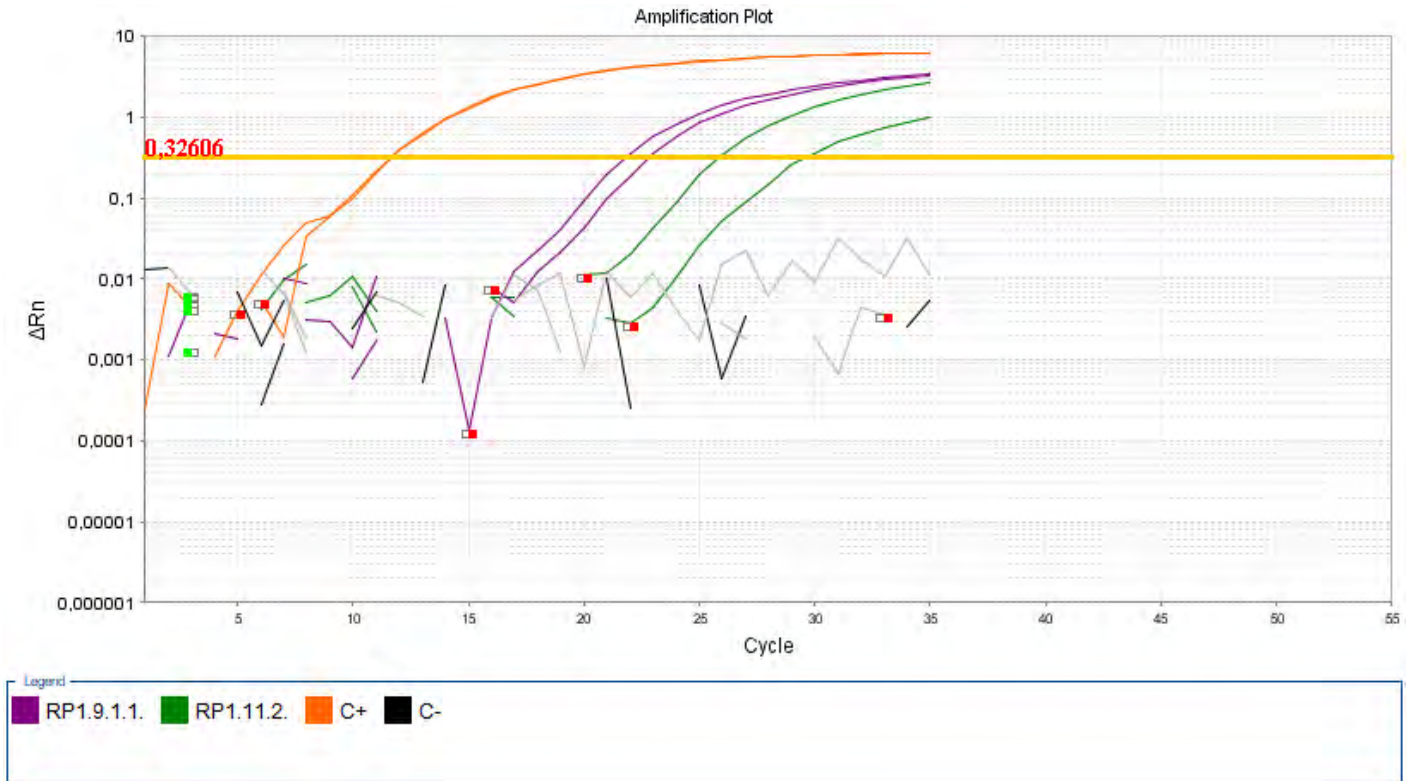


Secretaria de Agricultura e Abastecimento - SAA Agência Paulista de Tecnologia dos Agronegócios Instituto Agronômico Centro APTA Citros Sylvio Moreira / Clínica Fitopatológica Via Anhanguera, km 158 - 13490-970 - Cordeirópolis - SP - Brasil (19) 3546 1399 / CNPJ: 46.384.400/0145-22		Enxada ABNT NBR ISO/IEC 17025 CR. 1143
Laboratório Credenciado: MAPA - Portaria Nº 121, de 08/11/2016 / RENASEM - SP-16331/2017		Cordeirópolis, 05/12/2018 LAUDO Nº 1663/18
LAUDO FITOPATOLÓGICO		RG: 783/18
<input type="checkbox"/> OFICIAL		<input checked="" type="checkbox"/> NÃO OFICIAL
Proprietário:	-	CPF: -
Empresa:	ADAB - Ag. Estadual de Defesa Agropecuária da Bahia	CNPJ: 03.057.966/0001-53
Propriedade:	Fazenda Bioenergia	IE: -
Endereço:	Av. Adhemar de Barros, 967 - Ondina	CEP: 40 170-110
Município:	Salvador	UF: BA
Contato:	(71) 3116-8407; 3116-8466	
Requerente:	Suely Xavier de Brito Silva	Término da análise: 05/12/2018
Datas:	Recebimento das amostras: 14/11/2018	
Matriz:	<input checked="" type="checkbox"/> FOLHA <input type="checkbox"/> RAIZ	
MÉTODO:	qPCR ME-CF-002	
Patógeno: <i>Candidatus Liberibacter spp.</i>		
Identificação das amostras		Resultado
Nº		
1	A01 - planta 01	NEG
2	A02 - planta 02	NEG
POS = presença do patógeno NEG = ausência do patógeno		

— Sentinel Routes
— Control Routes



Oeste 2022: CLas positive in vectors



— Sentinel Routes
— Control Routes



Oeste 2022: CLas negative in plants

4km radius





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Sentinel Routes and ARMs are accessible, available and affordable. They are still to be used beyond the regional plant health agencies

Francisco Ferraz Laranjeira
Director General, Embrapa Cassava & Fruits

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