Electronic Supporting Information

Salvadoran Celastraceae species as a source of antikinetoplastid quinomethide triterpenoids

Marvin J. Núñez[1], Morena L. Martínez[1], Ulises G. Castillo[1], Karla Carolina Flores[1], Jenny Menjívar[2], Atteneri López-Arencibia[3,4,5], Carlos J. Bethencourt-Estrella[3], Ignacio A. Jiménez[6], José E. Piñero[3,4,5], Jacob Lorenzo-Morales[3,4,5] and Isabel L. Bazzocchi[6,*]

[1] Laboratorio de Investigación en Productos Naturales (LIPN), Facultad de Química y Farmacia, Universidad de El Salvador, Final Ave. Mártires Estudiantes del 30 de Julio, 01101, San Salvador, El Salvador
[2] Museo de Historia Natural de El Salvador, Ministerio de Cultura, Final Calle Los Viveros, Col. Nicaragua, 01101, San Salvador, El Salvador
[3] Instituto Universitario de Enfermedades Tropicales y Salud Pública de Canarias, Universidad de La Laguna, 38200 La Laguna, Tenerife, Spain
[4] Departamento de Obstetricia y Ginecología, Pediatría, Medicina Preventiva y Salud Pública, Toxicología, Medicina Legal y Forense y Parasitología, Universidad de La Laguna, 38200 La Laguna, Tenerife, Spain
[5] Centro de Investigación Biomédica en Red de Enfermedades Infecciosas (CIBERINFEC), Instituto de Salud Carlos III, 28220 Madrid, Spain
[6] Instituto Universitario de Bio-Orgánica Antonio González, Departamento de Química Orgánica, Universidad de La Laguna, Avenida Astrofísico Francisco Sánchez 2, 38206 La Laguna, Tenerife, Spain

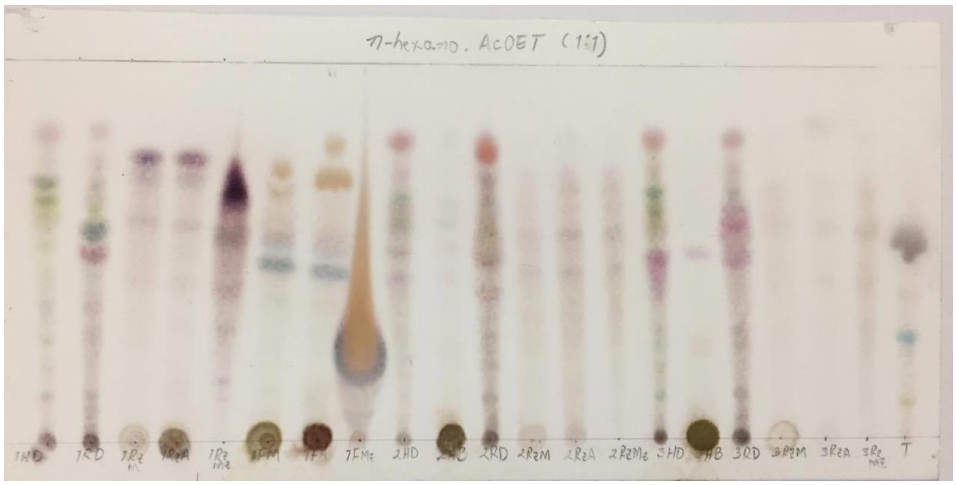
Table of Contents

Table SI. Organic extracts and fractions of Celastraceae species assayed against T*rypanosoma cruzi*, *Leishmania amazonensis*, and *Leishmania donovani*.

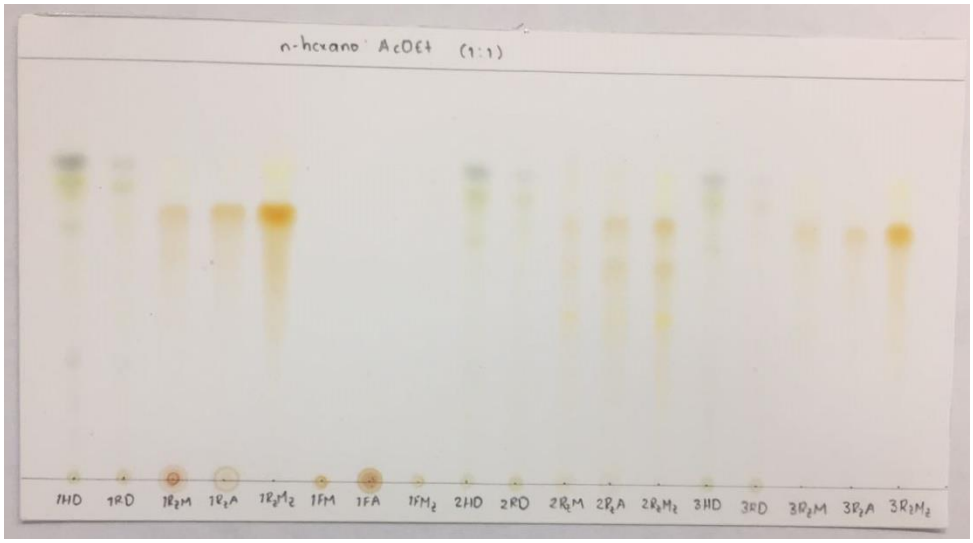
Specie	Plant part	Fraction or Extract	*T. cruzi* IC_{50} (μg/mL)	*L. amazonensis* IC_{50} (μg/mL)	*L. donovani* IC_{50} (μg/mL)
Maytenus segoviarum	Leaves	F/DCM	inactive	inactive	inactive
		F/*n*-BuOH			
	Branches	F/DCM		7.83 ± 0.33	
		F/*n*-BuOH		inactive	
	Root bark	E/hex:Et_2O (1:1)	1.36 ± 0.17	0.85 ± 0.10	>100
		E/MeOH	>100	36.50 ± 4.49	inactive
		E/Acetone	>50	>50	
	Fruits	E/hex:Et_2O (1:1)	inactive	inactive	
		E/MeOH			
		E/Acetone			
Quetzalia ilicina	Leaves	F/DCM		15.20 ± 0.80	
		F/*n*-BuOH		inactive	
	Branches	F/DCM		>50	
		F/*n*-BuOH		inactive	
	Root bark	E/hex:Et_2O (1:1)	3.45 ± 0.35	3.06 ± 0.77	>50
		E/MeOH	3.06 ± 0.68	1.40 ± 0.21	>100
		E/Acetone	1.58 ± 0.03	1.34 ± 0.22	5.42 ± 0.85
	Fruits	E/hex:Et_2O (1:1)	inactive	inactive	inactive
		E/MeOH			51.76 ± 0.95
		E/Acetone			inactive
Zinowiewia integerrima	Leaves	F/DCM		>50	
		F/*n*-BuOH		inactive	
	Branches	F/DCM		23.78 ± 0.44	
		F/*n*-BuOH		inactive	
	Root bark	E/hex:Et_2O (1:1)	0.71 ± 0.04	0.59 ± 0.05	>100
		E/MeOH	2.87 ± 0.39	1.13 ± 0.07	>100
		E/Acetone	0.75 ± 0.07	0.38 ± 0.08	>100
Wimmeria cyclocarpa	Leaves	F/DCM	inactive	inactive	inactive
		F/*n*-BuOH			
	Branches	F/DCM			
		F/*n*-BuOH			
	Root bark	E/hex:Et_2O (1:1)	>50	6.96 ± 0.88	>50
		E/MeOH	inactive	24.99 ± 0.74	inactive
		E/Acetone	>50	9.32 ± 1.96	>50
	Fruits	E/hex:Et_2O (1:1)	inactive	inactive	inactive
		E/MeOH			
		E/Acetone			
Euonymus enantiophyllus	Leaves	F/DCM			
		F/*n*-BuOH			
	Branches	F/DCM			
		F/*n*-BuOH			
	Root bark	E/hex:Et_2O (1:1)		2.05 ± 0.10	
		E/MeOH		precipitate	
		E/Acetone		4.58 ± 0.05	
	Fruits	E/Acetone		inactive	

E= extract; F= fraction; DCM = Dichloromethane; n-BuOH = n-butanol; hex = hexanes; inactive > 100 μg/mL.

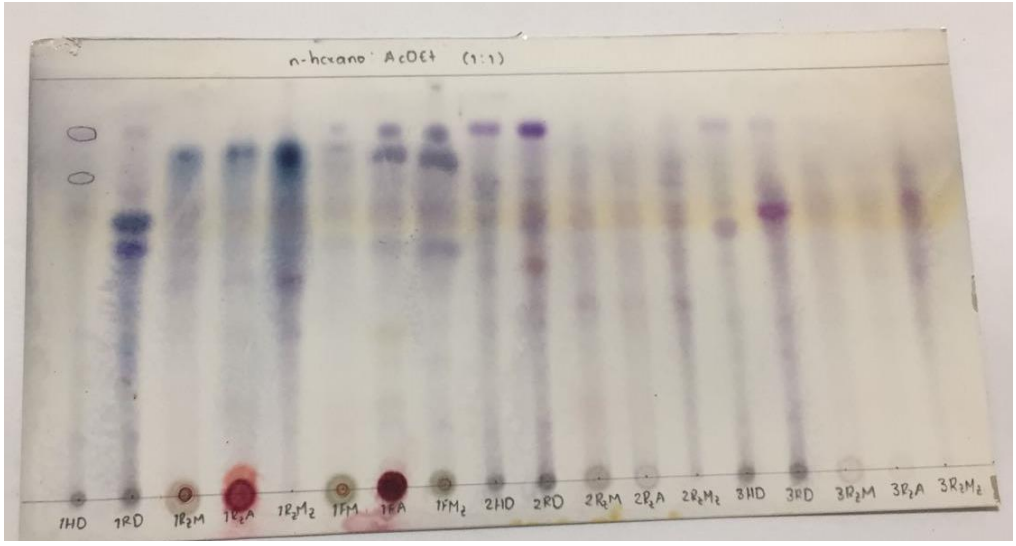
Figure SI. Selected Thin Layer Chromatography (TLC) of phytochemical analysis.



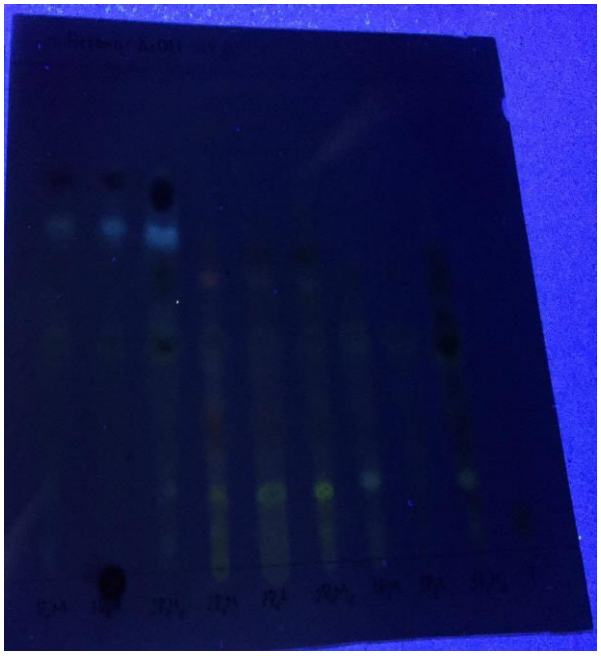
Sterols TLC [hexanes-ethyl acetate (1:1) developed with Liebermann-Burchard's reagent]



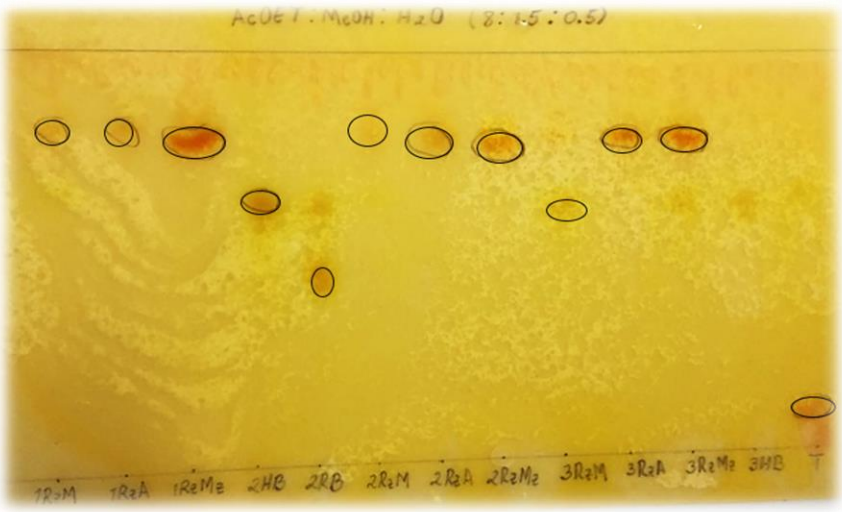
QMTs TLC [(hexanes-ethyl acetate (1:1); developed with visible light]



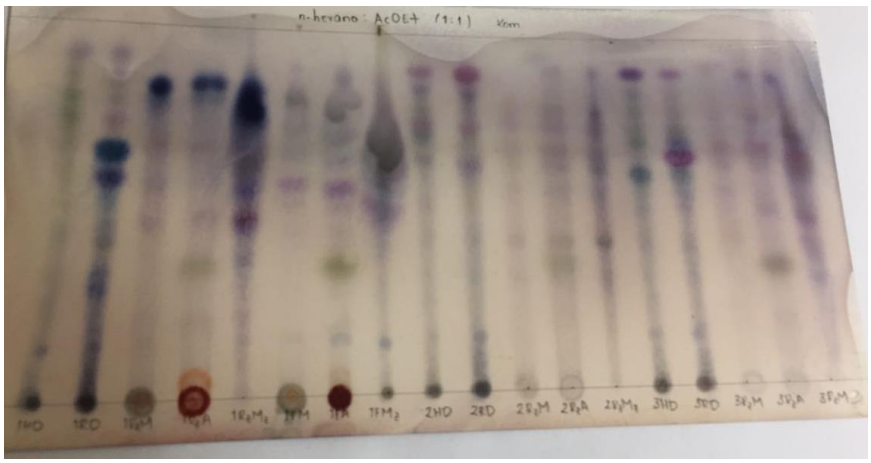
QMTs TLC [(hexanes-ethyl acetate (1:1); developed with Oleum's reagent and heat 100°C]



Flavonoids TLC [(hexanes-ethyl acetate (1:1); developed with 1% aluminum trichloride's reagent, and UV-365 nm]



Alkaloids TLC [(ethyl acetate-MeOH-H_2O (8:1.5:0.5); developed with Dragendorff's reagent]



Triterpenes TLC [(hexanes-ethyl acetate (1:1); developed with Vainillin-sulfiric acid's reagent and heat 100°C]