SUPPLEMENTARY MATERIALS

CHARACTERIZATION AND ANTIFUNGAL ACTIVITY OF LIMONOID CONSTITUENTS ISOLATED FROM MELIACEAE PLANTS *MELIA DUBIA*, *ANPHANAMIXIS POLYSTACHYA* AND *SWIETENIA MACROPHYLLA* AGAINST PLANT PATHOGENIC FUNGI *IN VITRO*

Thanh Nguyen Tan[1], Hieu Tran Trung[2], Quang Le Dang[3,*], Hien Vu Thi[4], Hoang Dinh Vu[5], Tuan Nguyen Ngoc[6], Hoai Thu Thi Do[3], Thanh Huong Nguyen[3], Quang Dang Ngoc[7], Thang Tran Dinh[6,*]

[1] *School of Chemistry, Biology and Environment, Vinh University, Nghean, 43100, Vietnam*

[2] *School of Natural Sciences Education, Vinh University, Nghean, 43100, Vietnam*

[3] *R&D Center of Bioactive Compounds, Vietnam Institute of Industrial Chemistry, Hanoi, 10000, Vietnam*

[4] *Ho Chi Minh City University of Natural Resources and Environment, Ho Chi Minh, 72114, Vietnam*

[5] *The School of Chemical Engineering, Hanoi University of Science and Technology, Hanoi,10000, Vietnam*

[6] *Institute of Biotechnology and Food Technology, Industrial University of Ho Chi Minh City, Ho Chi Minh, 71408, Vietnam*

[7] *Faculty of Chemistry, Hanoi National University of Education, Hanoi, 10000,Vietnam*

***Corresponding authors:**

Thang Tran Dinh; Email: thangtd@iuh.edu.vn

Quang Le Dang; Email: ledangquang2011@gmail.com

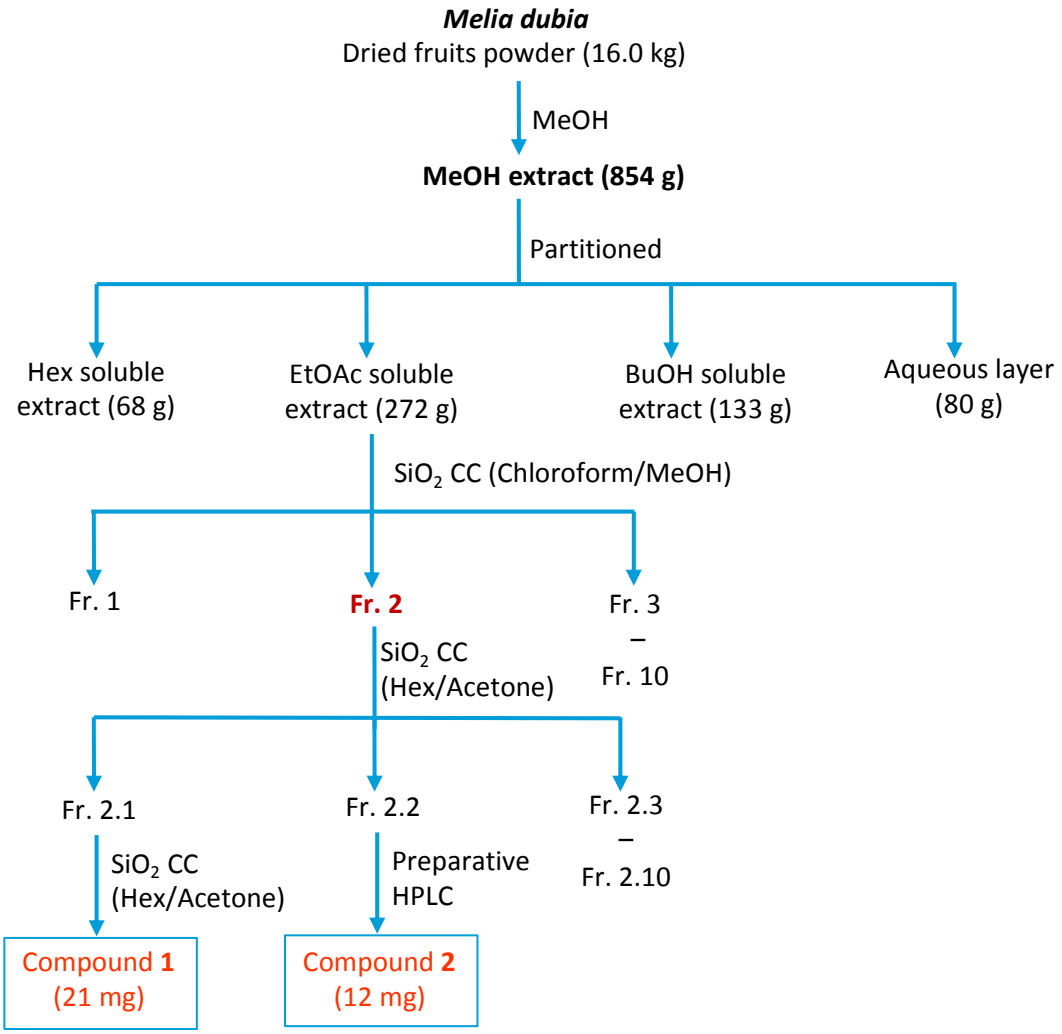

Figure S1a. Isolation scheme of isolated compounds **1-2** from the fruits of *Melia dubia*

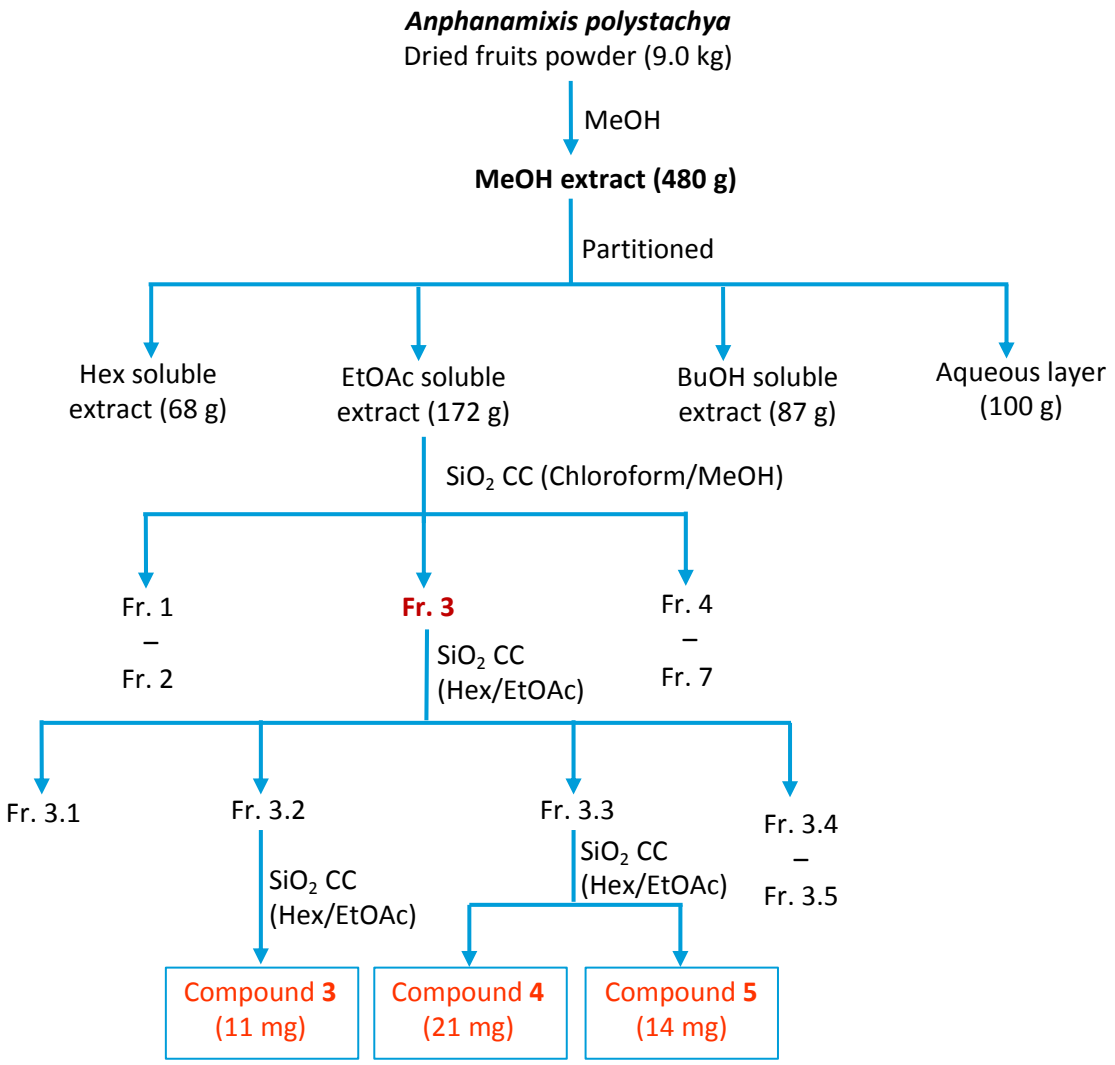

Figure S1b. Isolation scheme of isolated compounds **3-5** from the fruits of *Anphanamixis polystachya*

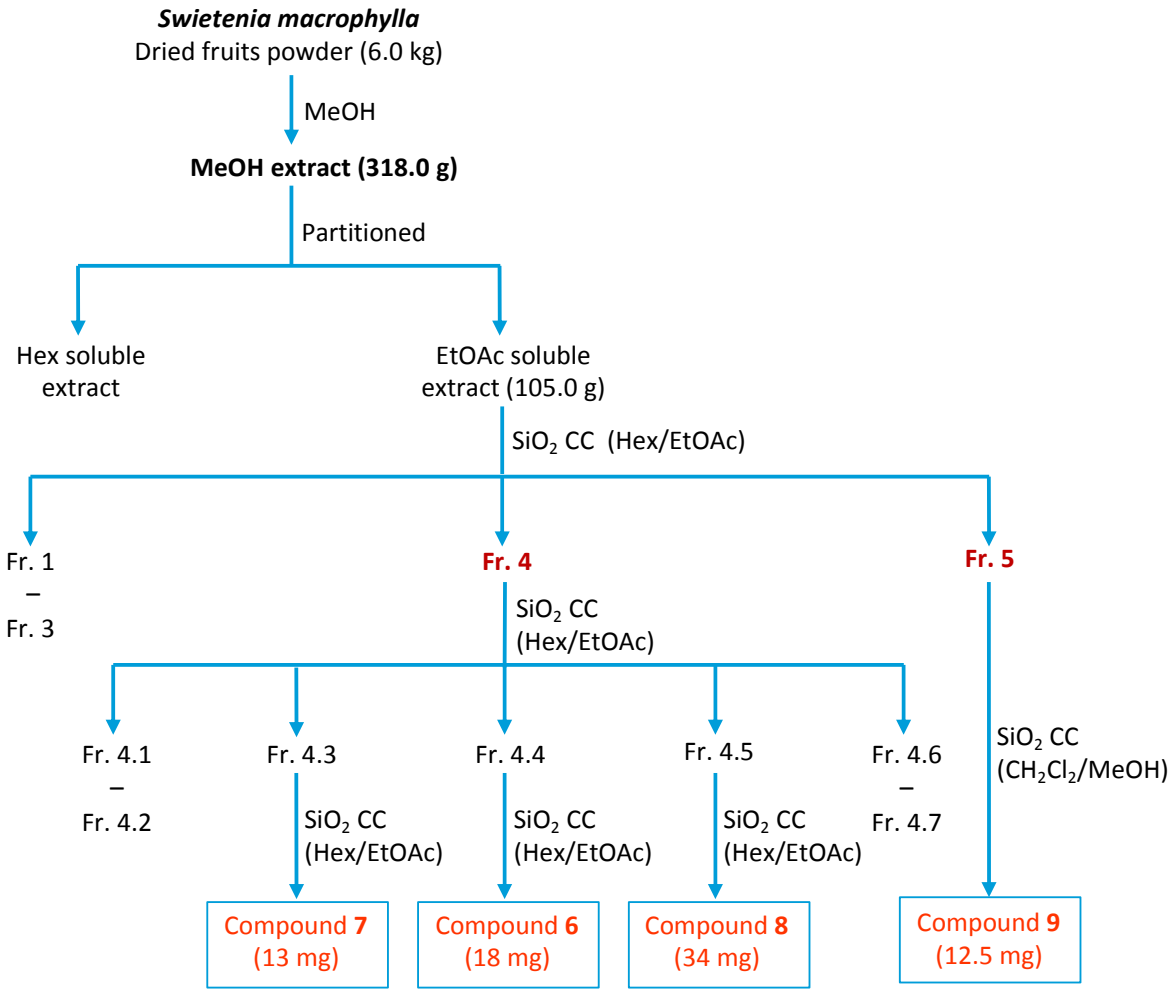

Figure S1c. Isolation scheme of isolated compounds **6-9** from the fruits of *Swietenia macrophylla*

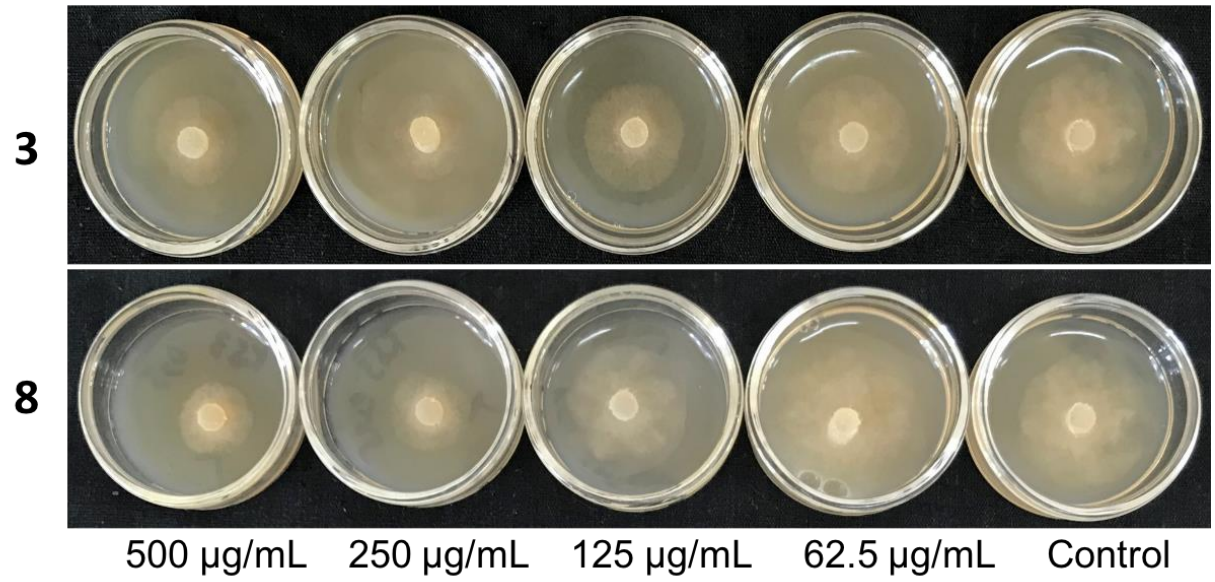

Figure S2. *In vitro* antifungal activity of the most active compounds **3** and **8** against the mycelial growth of *Phytophthora* spp.

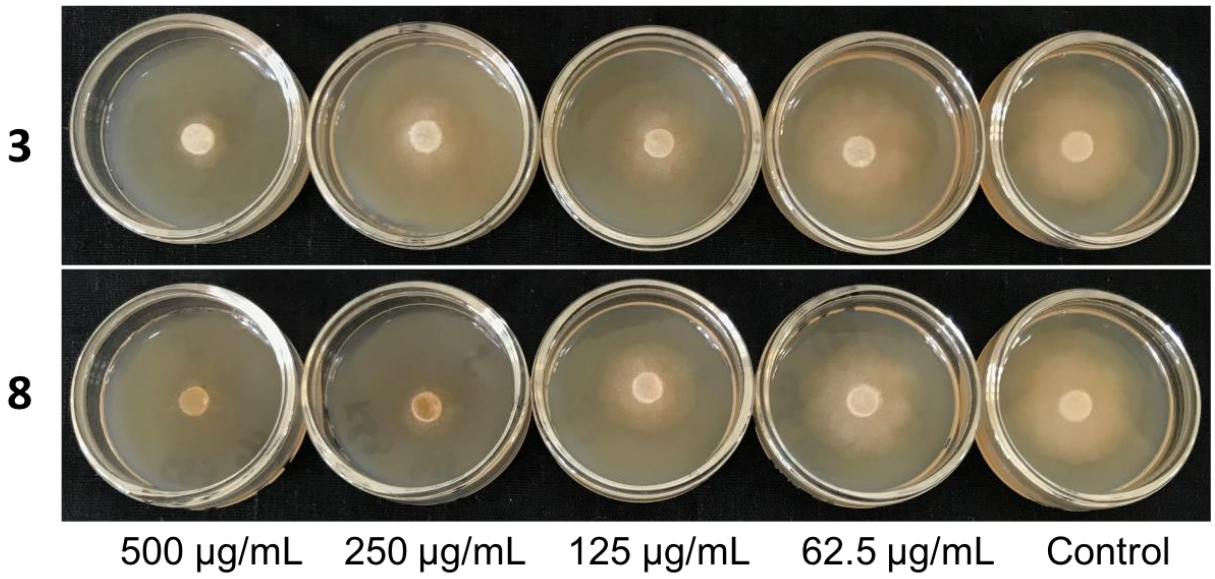

Figure S3. *In vitro* antifungal activity of the most active compounds **3** and **8** against the mycelial growth of *Phytophthora capsici*

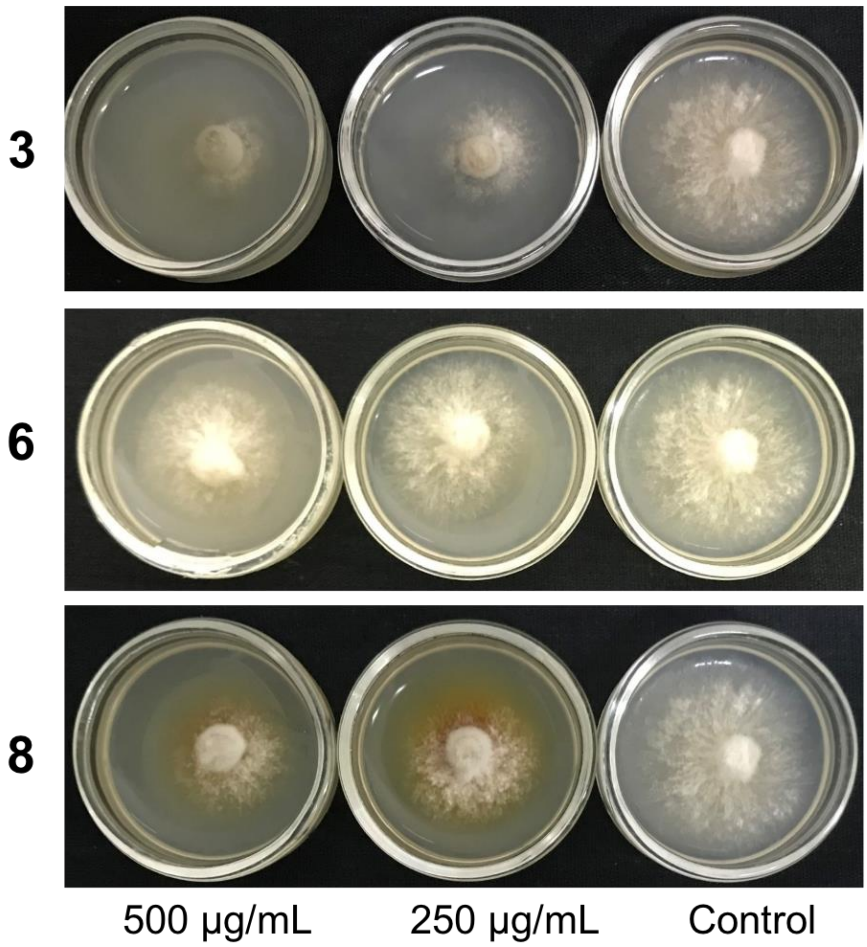

Figure S4. *In vitro* antifungal activity of the most active compounds **3, 6** and **8** against the mycelial growth of *Phytophthora palmivora*

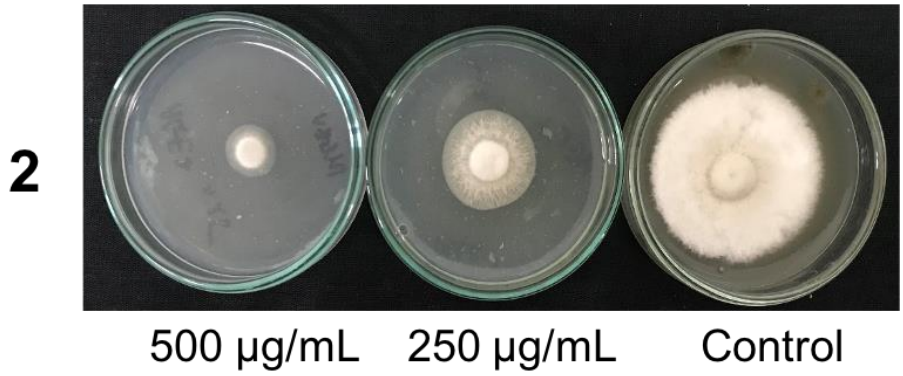

Figure S5. *In vitro* antifungal activity of compound **2** against the mycelial growth of *Magnaporthe oryzae*

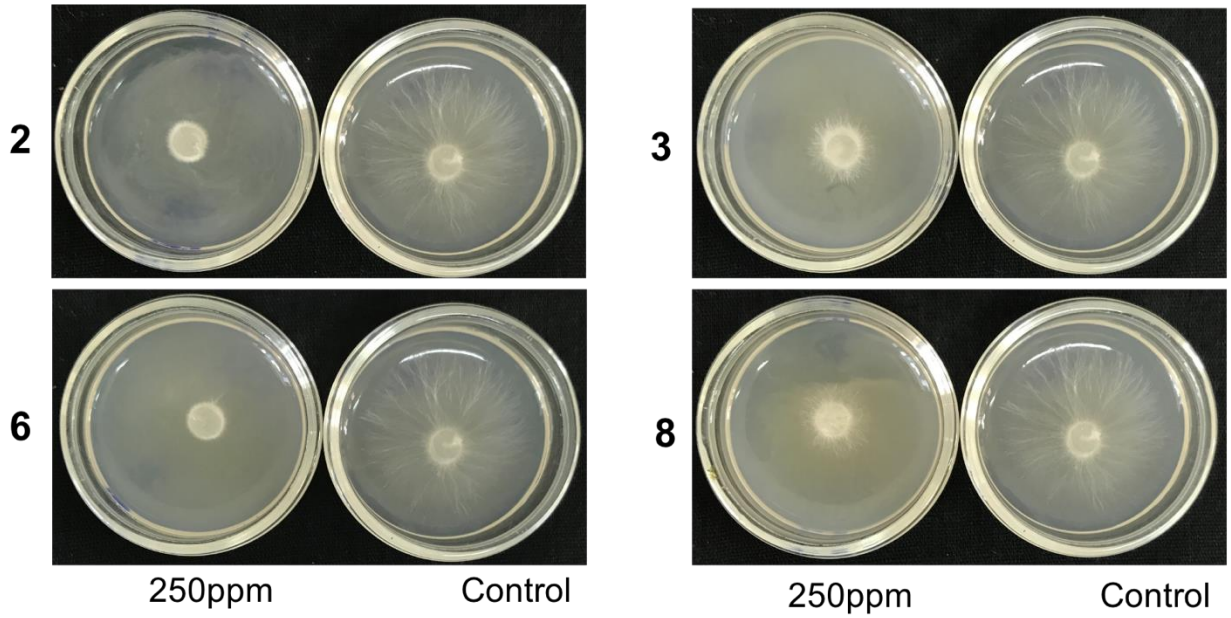

Figure S6. *In vitro* antifungal activity of the most active compounds **2, 3, 6** and **8** against the mycelial growth of *Sclerotium rolfsii*.

Table S1. *In vitro* inhibitory activity of MeOH extracts from *Melia dubia*, *Anphanamixis polystachya* and *Swietenia macrophylla* against *Magnaporthe oryzae*, *Phytophthora capsici* and *Sclerotium rolfsii*

Fungi	Conc.	Inhibition (%)		
	(µg/mL)	MeOH-MD[b]	MeOH-AP	MeOH-SM
MG[a]	1000	19.60 ± 8.40	31.40 ± 1.41	27.10 ±6.55
	2000	40.27 ± 5.36	50.30 ± 4.71	nt
PC	1000	6.40 ± 3.93	15.80 ± 3.16	19.60 ± 3.15
	2000	11.00 ± 3.40	21.40 ± 3.90	31.90 ± 3.90
SR	1000	44.81 ± 6.76	29.51 ± 7.31	27.90 ± 4.36
	2000	78.85 ± 1.77	60.42 ± 4.03	69.99 ± 2.94

[a] MG: *Magnaporthe oryzae*. PC: *Phytophthora capsici*. SR: *Sclerotium rolfsii*

[b] Methanol extracts of *Melia dubia* (MeOH-MD), *Anphanamixis polystachya* (MeOH-AP) and *Swietenia macrophylla* (MeOH-SM) against *M. oryzae*, *P. capsici* and *S. rolfsii*

nt: not tested.