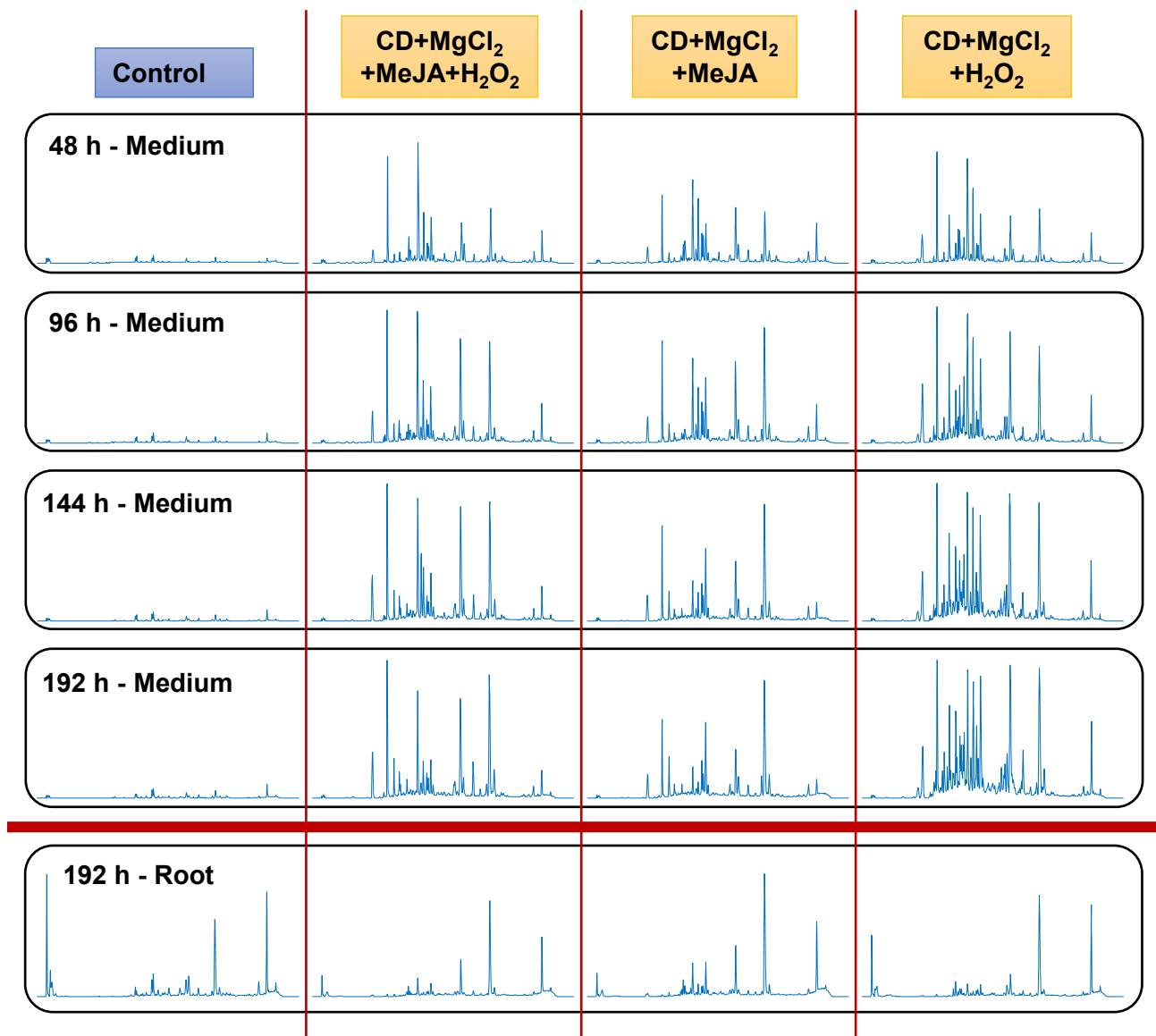
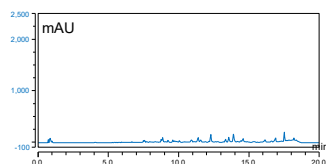
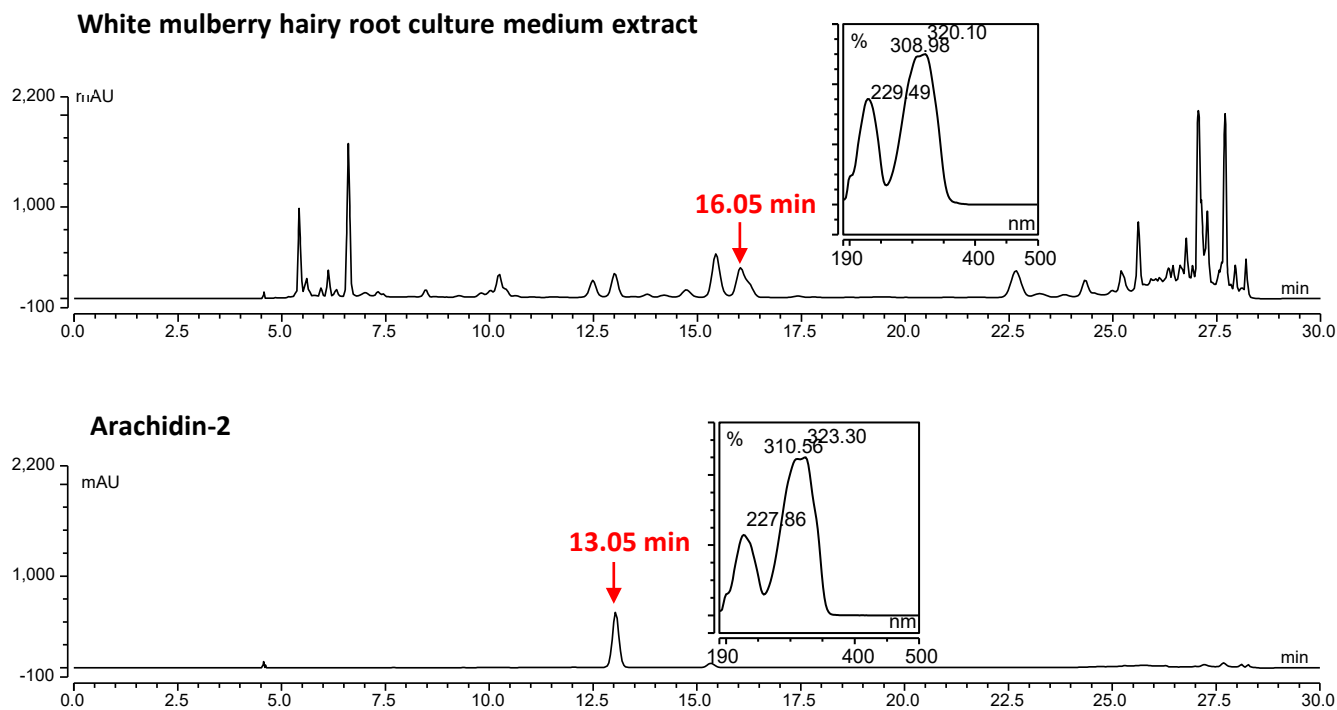


Supplementary Information

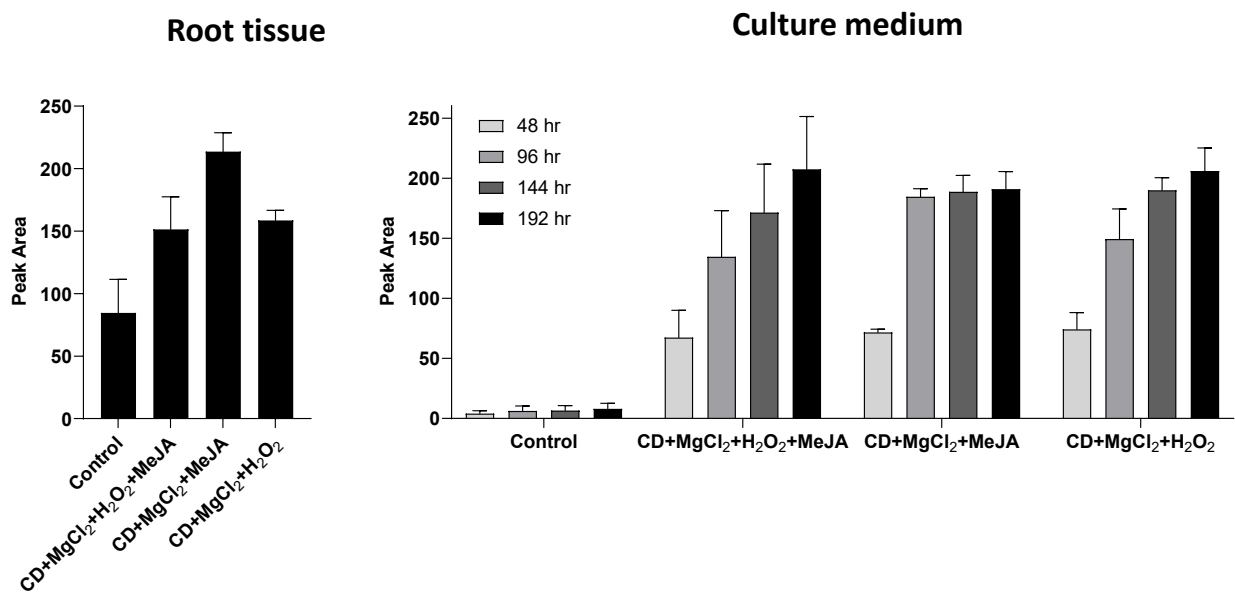
**35-day culture medium before
the exchange with medium
containing elicitors**



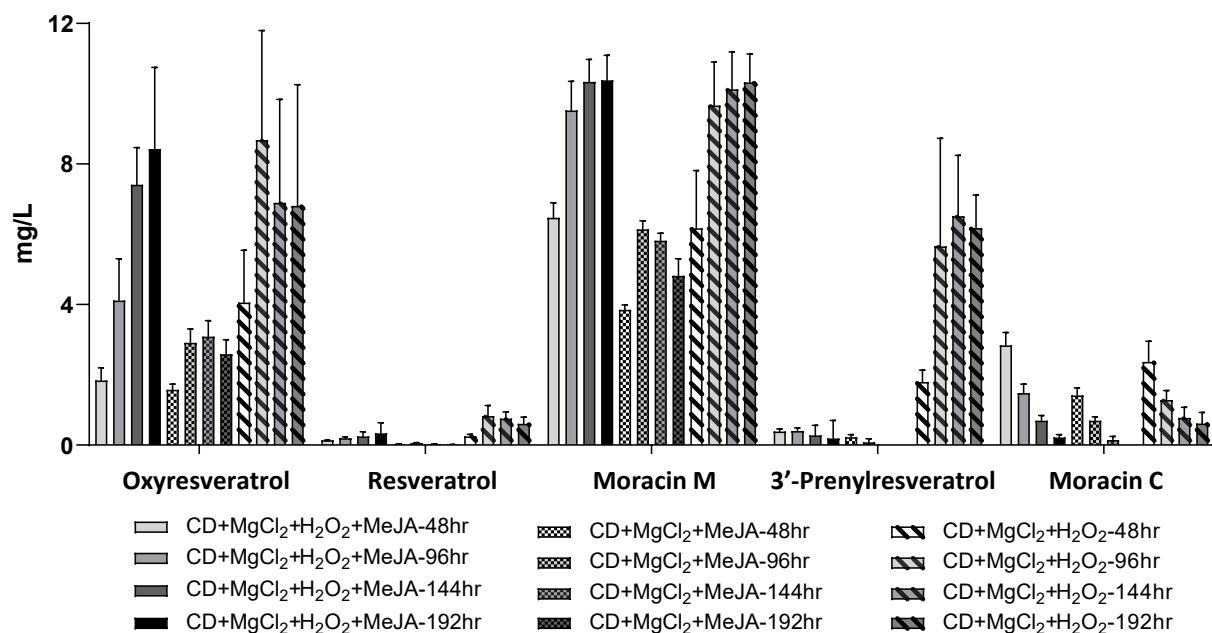
Supplementary Figure S1. HPLC chromatograms of extracts from the medium and tissue of hairy root cultures of white mulberry line U-D2 after different elicitation treatments. *Top:* Chromatogram of the medium extract before elicitation. *Control:* Chromatogram of medium extracts after medium exchange without elicitors. The extracts of the medium were concentrated 10-fold before HPLC analysis. All chromatograms were monitored at 320 nm. The y-axis of each chromatogram is at the same scale from -100 mAU to 2500 mAU. CD: methyl- β -cyclodextrin; MeJA: methyl jasmonate.



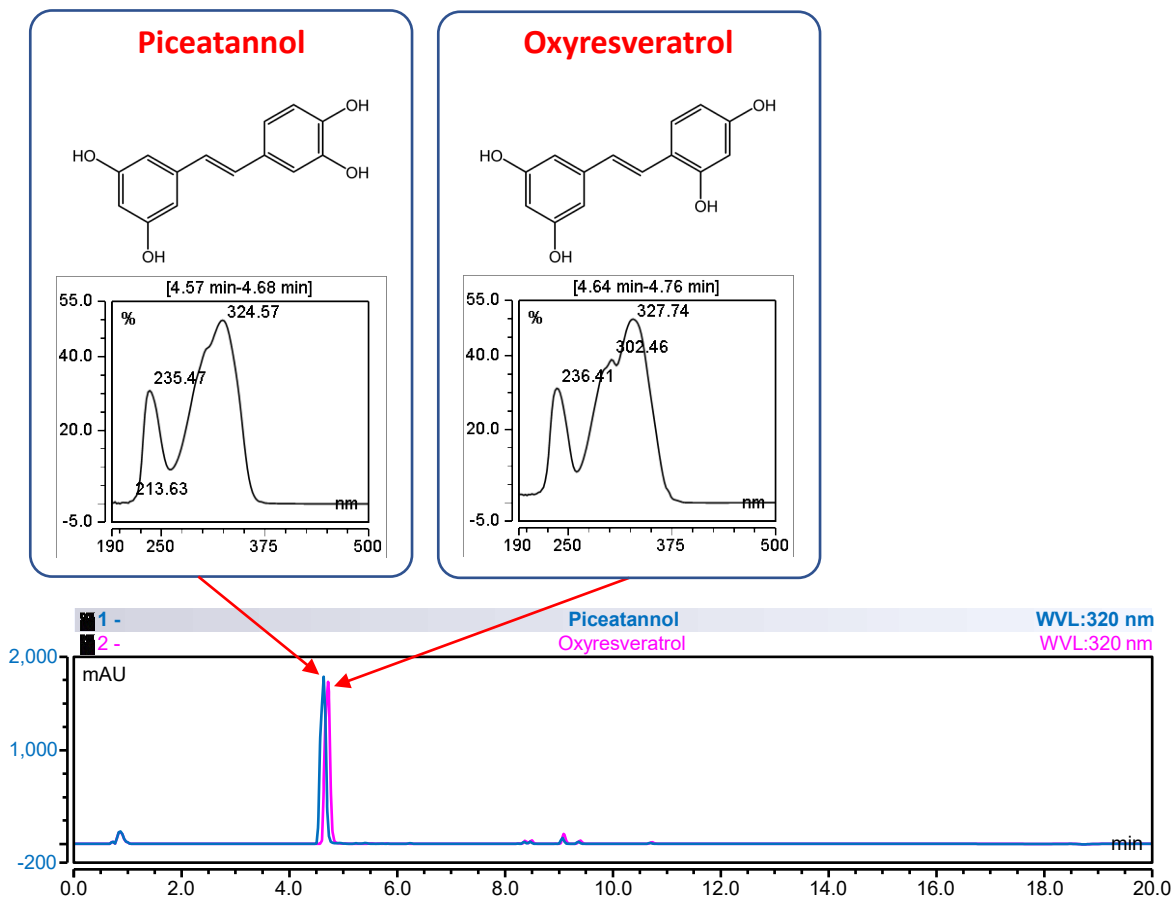
Supplementary Figure S2. HPLC analyses of the medium extract from elicited hairy root cultures of white mulberry (CD+MgCl₂+H₂O₂, 144 h) and arachidin-2 standard. Samples were analyzed using conditions optimized for peanut stilbenes. CD: methyl- β -cyclodextrin; MeJA: methyl jasmonate.



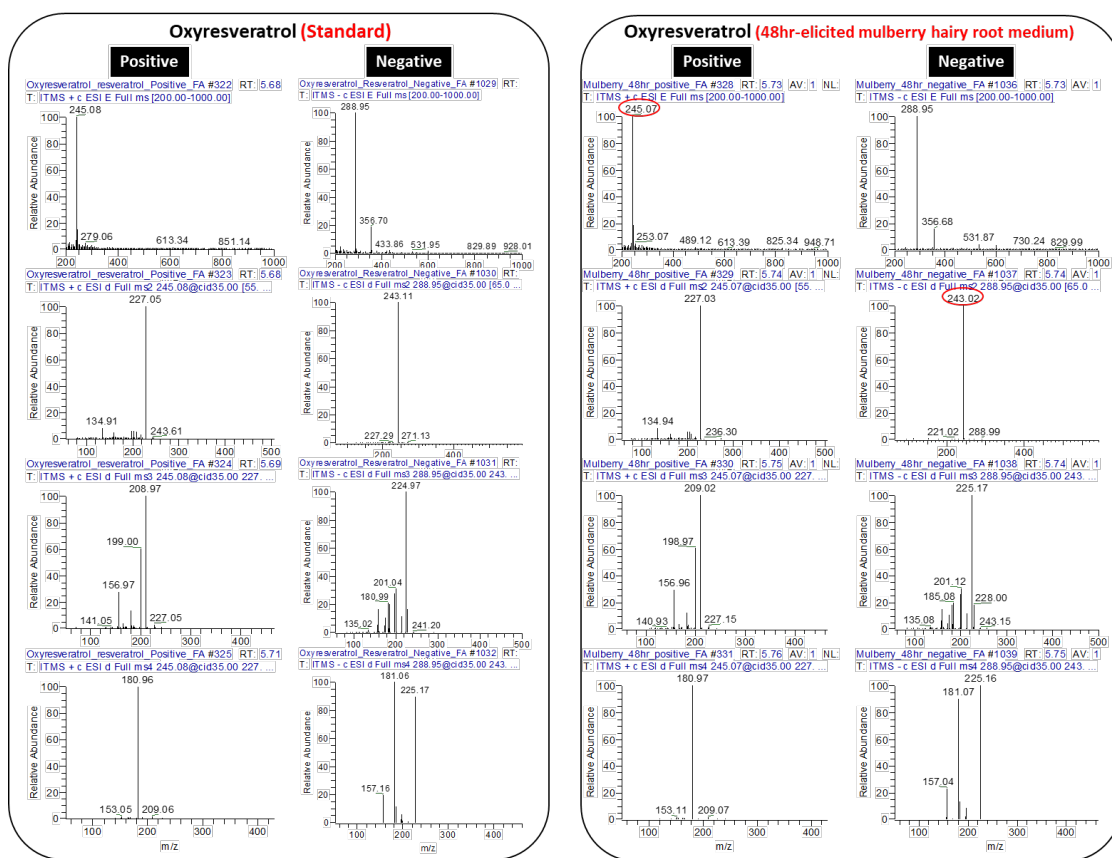
Supplementary Figure S3. Quantification of HPLC peak area of chalcomoracin detected in white mulberry hairy root line U-D2. CD: methyl- β -cyclodextrin; MeJA: methyl jasmonate.



Supplementary Figure S4. Time course of yield of stilbenes and aryl benzofurans in the medium of white mulberry hairy root culture line U-D2 after treatment with different elicitors. Yields are expressed in mg/L of culture medium. Values are the average of four biological replicates and error bars represent standard deviation. CD: methyl- β -cyclodextrin; MeJA: methyl jasmonate.



Supplementary Figure S5. HPLC analyses of piceatannol and oxyresveratrol standards.



Supplementary Figure S6. Mass spectrometry analysis of oxyresveratrol standard (left) and oxyresveratrol identified in extract from the medium of elicited hairy root culture of white mulberry, line U-D2 (right). Elicitation was done with CD+MgCl₂+H₂O₂ for 48 hours.

Supplementary Table S1. Yield of stilbenes and benzofurans in the medium of white mulberry hairy root cultures, line U-D2. The yields are the average of four biological replicates expressed in mg/g DW of root tissue.

Secreted Compounds in U-D2 Elicited Medium (mg/g DW of root tissue)					
	Oxyresveratrol	Resveratrol	Moracin M	3'- Prenylresveratrol	Moracin C
CD+MgCl ₂ +H ₂ O ₂ +MeJA-48hr	1.15±0.13	0.09±0.02	4.14±0.74	0.25±0.08	1.82±0.40
CD+MgCl ₂ +H ₂ O ₂ +MeJA-96hr	2.57±0.50	0.13±0.03	6.14±1.48	0.27±0.11	0.97±0.34
CD+MgCl ₂ +H ₂ O ₂ +MeJA-144hr	4.75±1.14	0.17±0.13	6.62±1.20	0.21±0.25	0.44±0.11
CD+MgCl ₂ +H ₂ O ₂ +MeJA-192hr	5.57±2.64	0.24±0.27	6.65±1.26	0.17±0.42	0.15±0.08
CD+MgCl ₂ +MeJA-48hr	0.73±0.08	0.01±0.00	1.79±0.08	0.10±0.03	0.66±0.14
CD+MgCl ₂ +MeJA-96hr	1.36±0.21	0.03±0.01	2.86±0.10	0.04±0.05	0.32±0.06
CD+MgCl ₂ +MeJA-144hr	1.44±0.27	0.01±0.01	2.71±0.24	-	0.07±0.05
CD+MgCl ₂ +MeJA-192hr	1.21±0.24	0.01±0.01	2.25±0.29	-	-
CD+MgCl ₂ +H ₂ O ₂ -48hr	2.93±0.62	0.18±0.01	4.59±0.86	1.37±0.35	1.82±0.65
CD+MgCl ₂ +H ₂ O ₂ -96hr	6.27±1.24	0.61±0.16	7.30±1.22	4.03±2.10	1.01±0.45
CD+MgCl ₂ +H ₂ O ₂ -144hr	4.93±1.38	0.56±0.11	7.65±1.14	5.00±1.71	0.63±0.39
CD+MgCl ₂ +H ₂ O ₂ -192hr	4.82±1.71	0.45±0.13	7.82±1.26	4.69±1.01	0.49±0.35

Supplementary Table S2. Yield of stilbenes and benzofurans in the medium of white mulberry hairy root cultures, line U-D2. The yields are the average of four biological replicates expressed in mg/L of culture medium.

Secreted Compounds in U-D2 Elicited Medium (mg/L)					
	Oxyresveratrol	Resveratrol	Moracin M	3'- Prenylresveratrol	Moracin C
CD+MgCl ₂ +H ₂ O ₂ +MeJA-48hr	1.84±0.36	0.14±0.01	6.47±0.43	0.38±0.07	2.84±0.37
CD+MgCl ₂ +H ₂ O ₂ +MeJA-96hr	4.11±1.19	0.20±0.03	9.52±0.83	0.40±0.09	1.48±0.26
CD+MgCl ₂ +H ₂ O ₂ +MeJA-144hr	7.41±1.06	0.25±0.13	10.34±0.64	0.28±0.29	0.69±0.14
CD+MgCl ₂ +H ₂ O ₂ +MeJA-192hr	8.42±2.33	0.34±0.30	10.38±0.71	0.19±0.51	0.22±0.08
CD+MgCl ₂ +MeJA-48hr	1.57±0.17	0.02±0.01	3.85±0.14	0.22±0.08	1.41±0.21
CD+MgCl ₂ +MeJA-96hr	2.91±0.39	0.05±0.02	6.14±0.24	0.08±0.10	0.69±0.11
CD+MgCl ₂ +MeJA-144hr	3.09±0.45	0.02±0.01	5.81±0.21	-	0.14±0.10
CD+MgCl ₂ +MeJA-192hr	2.59±0.41	0.01±0.01	4.82±0.49	-	-
CD+MgCl ₂ +H ₂ O ₂ -48hr	4.06±1.49	0.25±0.05	6.17±1.64	1.80±0.33	2.37±0.59
CD+MgCl ₂ +H ₂ O ₂ -96hr	8.68±3.12	0.83±0.30	9.66±1.24	5.66±3.08	1.28±0.27
CD+MgCl ₂ +H ₂ O ₂ -144hr	6.90±2.94	0.75±0.19	10.13±1.07	6.51±1.73	0.77±0.30
CD+MgCl ₂ +H ₂ O ₂ -192hr	6.81±3.45	0.61±0.19	10.33±0.80	6.18±0.94	0.61±0.31