

Effect of pinocembrin isolated from Mexican brown propolis on diabetic nephropathy

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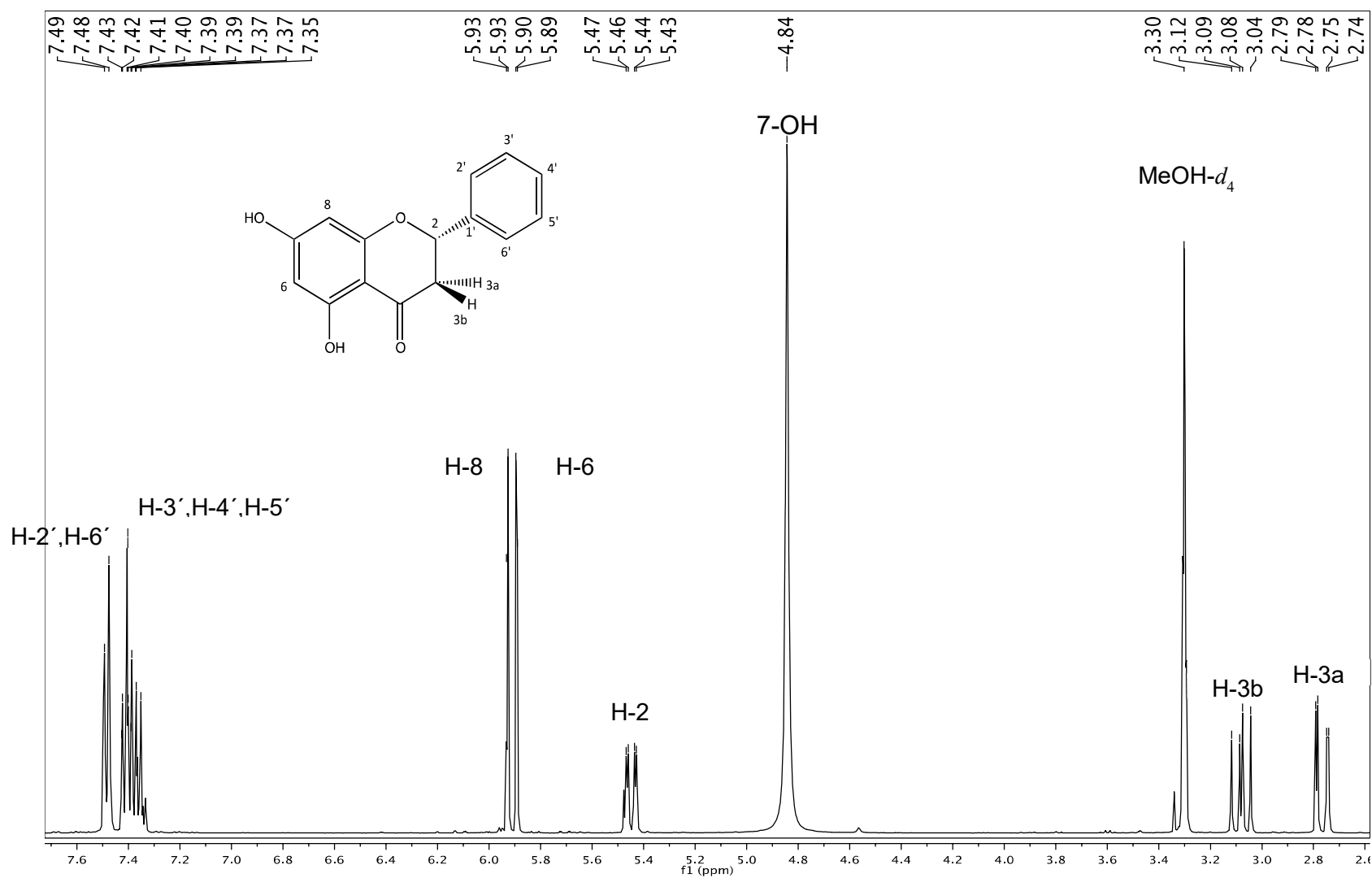


Figure S1. ¹H-NMR of pinocembrin (1)

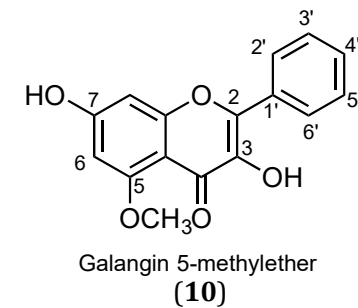
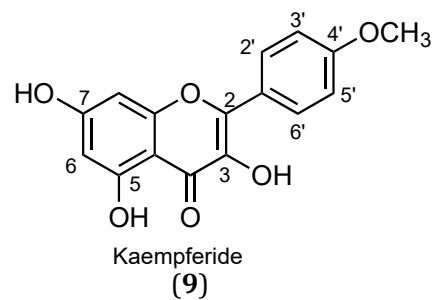
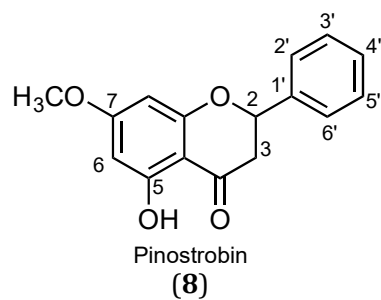
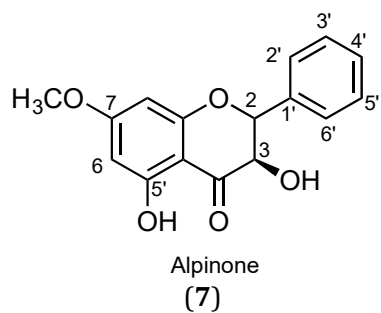
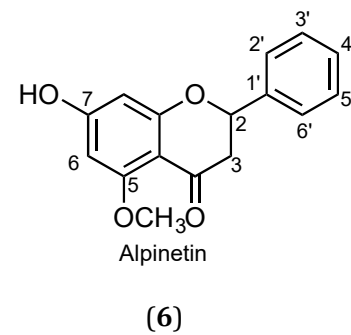
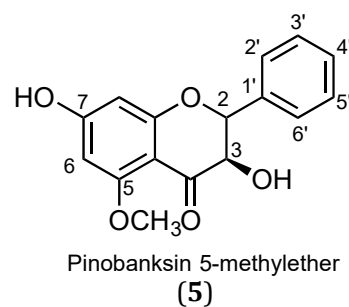
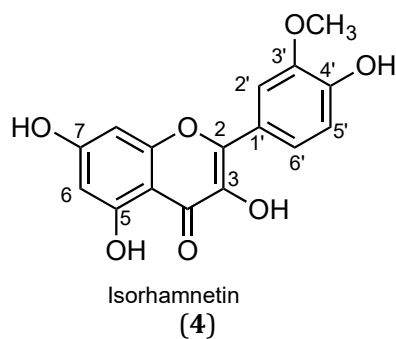
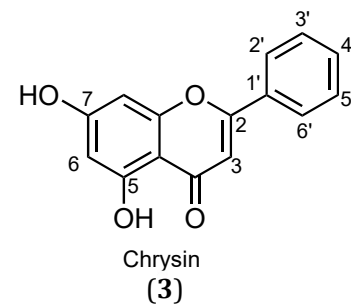
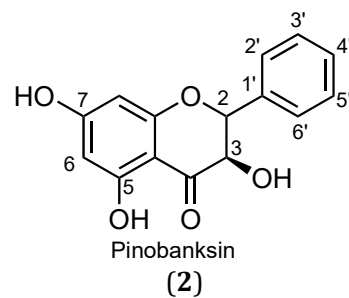
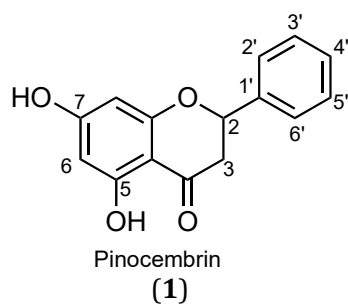


Figure S2. Flavonoids isolated from Mexican propolis.

Table S1. ^1H NMR data of the flavonoids isolated from Mexican propolis.

H	Pinocembrin (1) (MeOH- d_4) ^a	Pinobanksin (2) (acetone- d_6) ^a	Chrysin (3) (DMSO- d_6) ^a	Isorhamnetin (4) (DMSO- d_6) ^a	Pinobanksin 5-methylether (5) (DMSO- d_6)	Alpinetin (6) (DMSO- d_6) ^a	Alpinone (7) (DMSO- d_6) ^a	Pinostrobin (8) (DMSO- d_6) ^a	Kaempferide (9) (DMSO- d_6) ^a	Galangin 5-methylether (10) (DMSO- d_6) ^a
2	5.45 (1H, dd, $J=16.0, 4.0$)	4.68 (1H, d, $J=12.0$ Hz)	-	-	4.32 (1H, d, $J=12.0$ Hz)	5.46 (1H, dd, $J=16.0, 4.0$ Hz)	5.05 (1H, d, $J=12.0$ Hz)	5.50 (1H, dd, $J=10.0, 3.3$ Hz)	-	-
3	3a 2.76 (1H, dd, $J=4.0, 16.0$ Hz) 3b 3.09 (1H, dd, $J=16.0, 12.0$ Hz)	5.18 (1H, d, $J=12.0$ Hz)	6.98 (1H, s)	-	5.28 (1H, d, $J=12.0$ Hz)	3a 2.60 (1H, dd, $J=4.0, 16.0$ Hz) 3b 2.97 (1H, dd, $J=16.0, 12.0$ Hz)	4.40 (1H, d, $J=12.0$ Hz)	3a 2.56 (1H, dd, $J=13.0, 3.0$ Hz) 3b 3.00 (1H, dd, $J=13.0, 10.0$ Hz)	-	-
6	5.93 (1H, d, $J=4.0$ Hz)	5.98 (1H, s, $J=2.0$ Hz)	6.20 (1H, d, $J=2.0$ Hz)	6.17 (1H, d, $J=2.0$ Hz)	5.94 (1H, d, $J=2.0$ Hz)	5.93 (1H, d, $J=2.0$ Hz)	5.98 (1H, d, $J=2.0$ Hz)	6.00 (1H, d, $J=2.0$ Hz)	6.27 (1H, d, $J=2.0$ Hz)	6.31 (1H, d, $J=2.0$ Hz)
7	-	-	-	-	-	-	-	-	-	-
8	5.90 (1H, d, $J=4.0$ Hz)	6.01 (1H, s, $J=2.0$ Hz)	6.52 (1H, d, $J=2.0$ Hz)	6.45 (1H, d, $J=2.0$ Hz)	6.05 (1H, d, $J=2.0$ Hz)	5.98 (1H, d, $J=2.0$ Hz)	6.10 (1H, d, $J=2.0$ Hz)	6.19 (1H, d, $J=2.0$ Hz)	6.55 (1H, d, $J=2.0$ Hz)	6.50 (1H, d, $J=2.0$ Hz)
2', 6'	7.49 (2H, dd, $J=8.0, 4.0$ Hz)	7.59 (2H, dd, $J=8.0, 4.0$ Hz)	8.1 (2H, dd, $J=8.0, 4.0$ Hz)	-	7.48 (2H, dd, $J=8.0, 4.0$ Hz)	7.48 (2H, dd, $J=8.0, 4.0$ Hz)	7.51 (2H, dd, $J=8.0, 4.0$ Hz)	7.51 (2H, dd, $J=8.0, 4.0$ Hz)	8.22 (2H, dd, $J=8.0, 4.0$ Hz)	8.12 (2H, dd, $J=8.0, 4.0$ Hz)
3'-5'	7.39 (3H, m)	7.45 (3H, m)	7.55 (3H, m)	-	7.41 (3H, m)	7.41 (3H, m)	7.48 (3H, m)	7.48 (3H, m)	7.13 (3H, m)	7.48 (3H, m)
2'	-	-	-	7.73 (1H, d, $J=2.0$ Hz)	-	-	-	-	-	-
5'	-	-	-	6.92 (1H, d, $J=8.0$ Hz)	-	-	-	-	-	-
5-OH	-	-	12.63 (1H, s)	12.70 (1H, s)	-	-	10.05 (1H, s)	-	-	-
5-OCH ₃	-	-	-	-	3.75 (3H, s)	3.72 (3H, s)	-	-	-	3.57 (3H, s)
7-OCH ₃	-	-	-	-	-	-	3.82 (3H, s)	3.74 (3H, s)	-	8.93 (1H, s)
3'-OCH ₃	-	-	-	3.82 (3H, s)	-	-	-	-	-	-
4'-OCH ₃	-	-	-	-	-	-	-	-	3.90 (3H, s)	-
4'-OH	-	-	-	9.32 (1H)	-	-	-	-	-	-