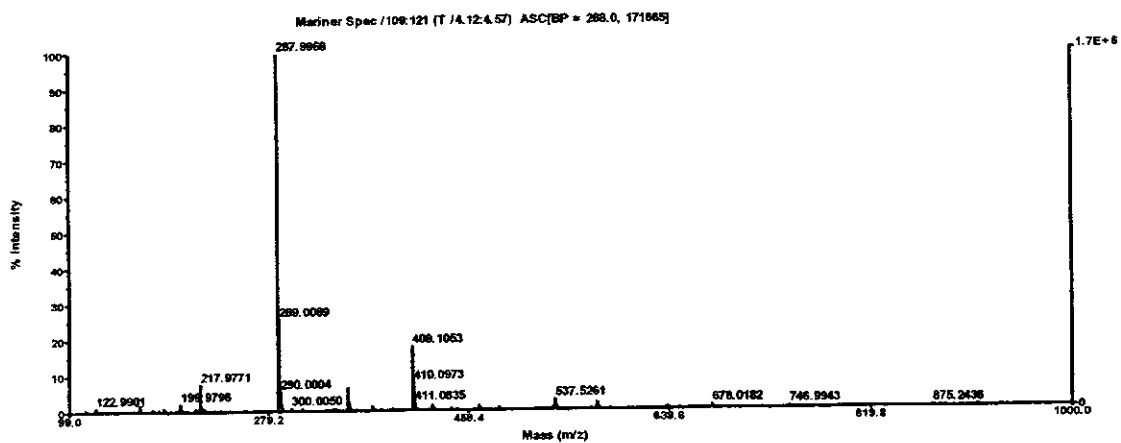
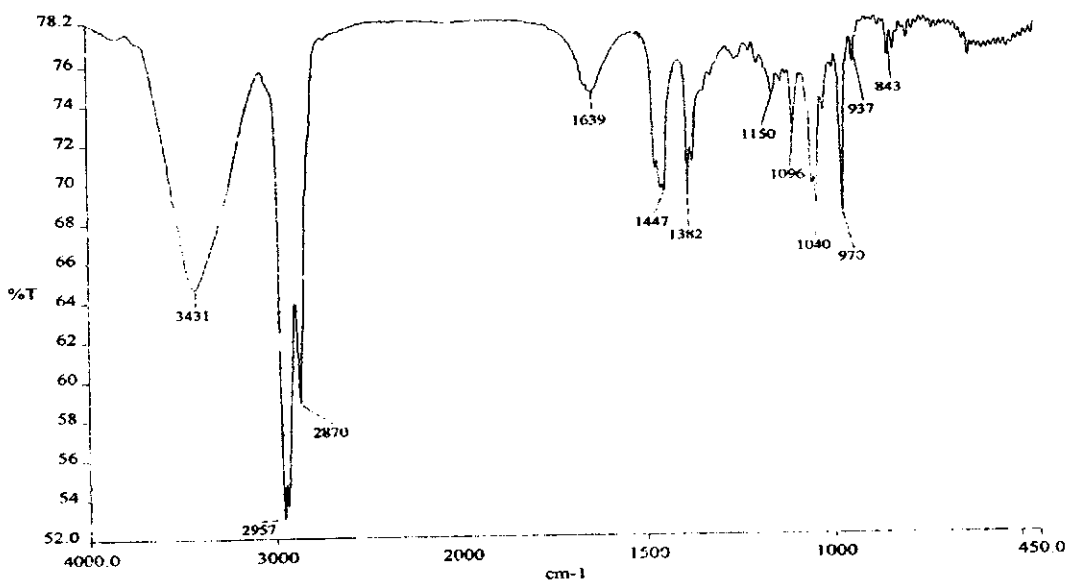


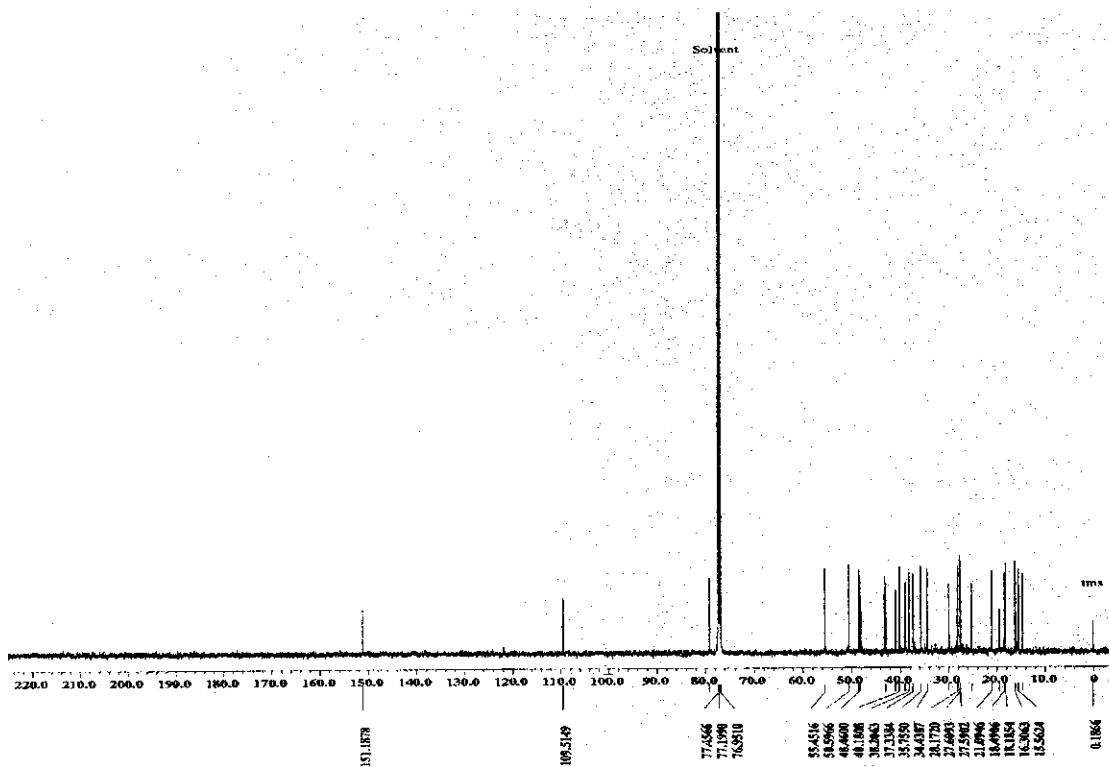
Lampiran 13. Gambar spektrum IR, MS dan NMR senyawa MA-6



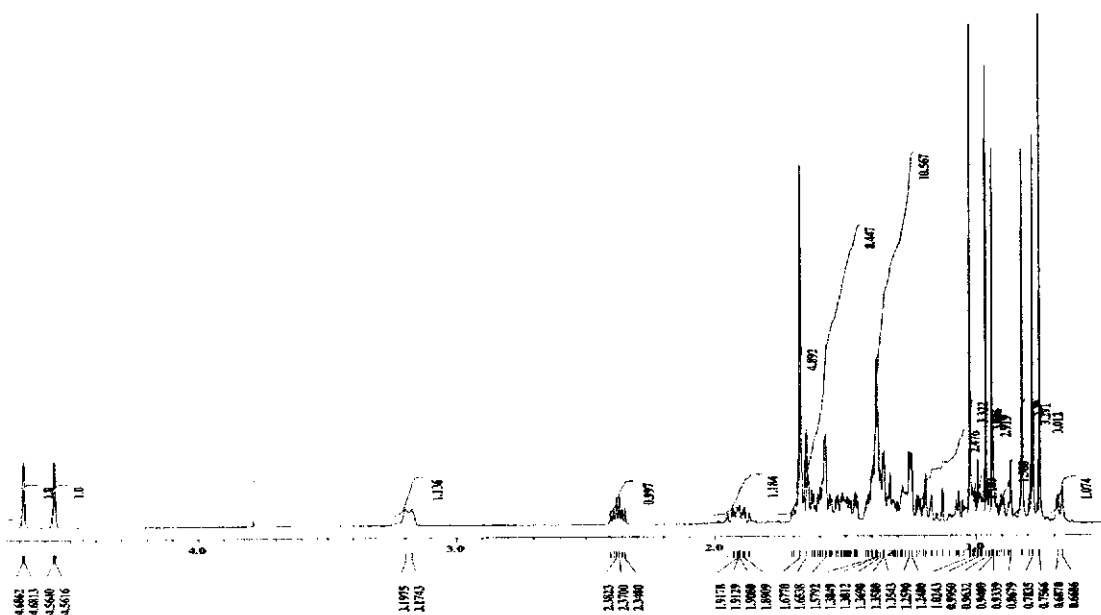
Spektrum LC-MS senyawa MA-6



Spektrum IR senyawa MA-6



Spektrum NMR ^{13}C senyawa MA-6



Spektrum NMR ^1H senyawa MA-6

Lampiran 14. Perbandingan harga data NMR senyawa MA-6 dengan lupeol
(Artanechemuge, 2004)

No	NMR ¹ H Ma-6	Harga Literatur	NMR C ¹³ Ma-6	Harga Literatur
1	1,65 (br); 0,9 (m)	1,65 (1H, m); 0,9 (1H, m)	38,8	38,7
2	1,59 (m); 1,68 (1H, m)	1,59 (1H, m); 1,67 (1H, m)	27,6	27,6
3	3,18 (1H, d)	3,20 (1H, dd)	79,2	79,2
4	-	-	39,0	38,8
5	0,68 (1H, d)	0,68 (1H, m)	55,4	55,3
6	overlap	1,40 (1H, m)	18,5	18,3
7	overlap	1,32 (1H, m)	34,4	34,3
8	-	-	40,1	40,8
9	overlap	1,29 (1H, m)	50,1	50,4
10	-	-	37,3	37,1
11	1,21 (m)	1,20 (1H, m)	21,1	20,9
12	1,06 (m)	1,07 (1H, m)	25,3	25,1
13	1,70 (1H, m)	1,68 (1H, m)	38,2	38,1
14	-	-	43,0	42,8
15	1,00 (1H, m)	1,00 (1H, m); 1,68 (1H, m)	27,6	27,4
16	overlap	1,37 (1H, m); 1,48 (1H, m)	35,7	35,6
17	-	-	43,2	42,9
18	overlap	1,37 (1H, m)	48,5	48,3
19	2,38 (1H, ddd)	2,38 (1H, ddd)	48,2	47,9
20	-	-	151,2	150,9
21	1,91 (m)	1,37 (1H, m); 1,92 (1H, m)	30,0	29,8
22	1,21 (m)	1,37 (1H, m); 1,19 (1H, m)	40,1	39,9
23	0,96 (3H, s)	0,97 (3H, s)	28,2	27,9
24	0,76 (3H, s)	0,76 (3H, s)	15,6	15,4
25	0,82 (3H, s)	0,83 (3H, s)	16,3	16,1