

## Supporting Information

### Polymer-supported benzimidazolium based ionic liquid: an efficient and reusable Brønsted acid catalyst for Biginelli reaction

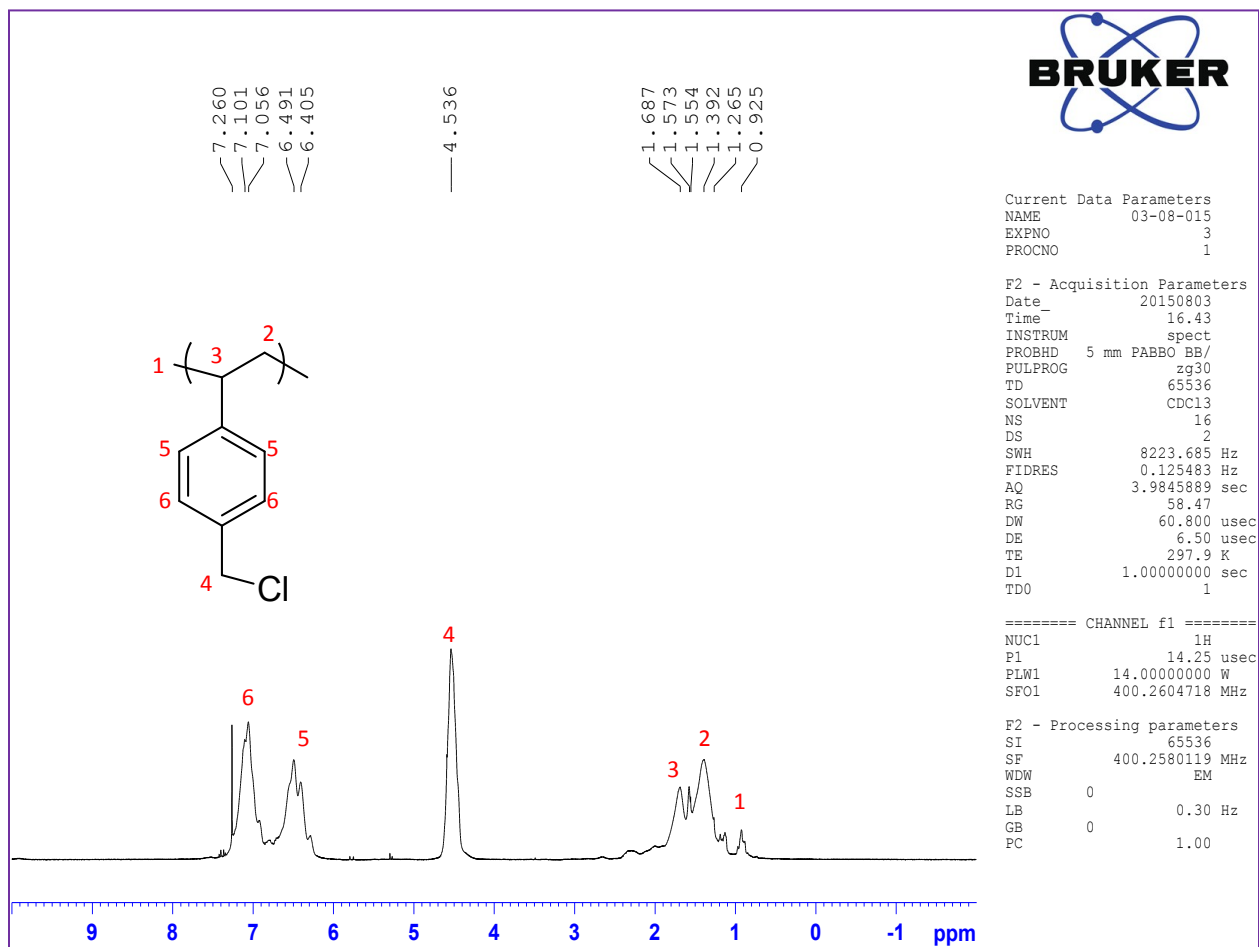
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Sr. No.	Table of Content	Page no.
Fig. S1	<sup>1</sup> H NMR spectra of poly(vinylbenzyl chloride) (1)	2
Fig. S2	<sup>13</sup> C NMR spectra of poly(vinylbenzyl chloride) (1)	3
Fig. S3	<sup>1</sup> H NMR spectrum of poly-1-(4-vinylbenyl)-1H-benzimidazole (2)	4
Fig. S4	<sup>13</sup> C NMR spectrum of poly-1-(4-vinylbenyl)-1H-benzimidazole (2)	5
Fig. S5	<sup>1</sup> H NMR spectrum of poly-(4-(1-(4-vinylbenzyl)-1H-benzimidazol-3-ium-3-yl)-butane-1-sulfonate (3)	6
Fig. S6	<sup>13</sup> C NMR spectrum of poly-(4-(1-(4-vinylbenzyl)-1H-benzimidazol-3-ium-3-yl)-butane-1-sulfonate (3)	7
Fig. S7	<sup>1</sup> H NMR spectrum of PSBIL (4)	8
Fig. S8	Photograph showing formation of Biginelli product on the wall of RBF.	9
9	Physical data, <sup>1</sup> H and <sup>13</sup> C NMR, FT-IR and GC-MS data of 3,4-dihydropyrimidine-2(1 <i>H</i> )-ones/thiones.	10-18
10	Copies of <sup>1</sup> H, <sup>13</sup> C NMR, FT-IR and GC-MS spectrum of as-synthesized 3,4-dihydropyrimidine-2(1 <i>H</i> )-ones/thiones.	19-114
11	<sup>1</sup> H, <sup>13</sup> C NMR, FT-IR and GC-MS spectrum 5-Ethoxycarbonyl-4-(3-hydroxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1 <i>H</i> )-thione Monastrol.	115-118



**Figure S1. <sup>1</sup>H NMR spectrum of poly(vinylbenzyl chloride) (1) (CDCl<sub>3</sub>).**

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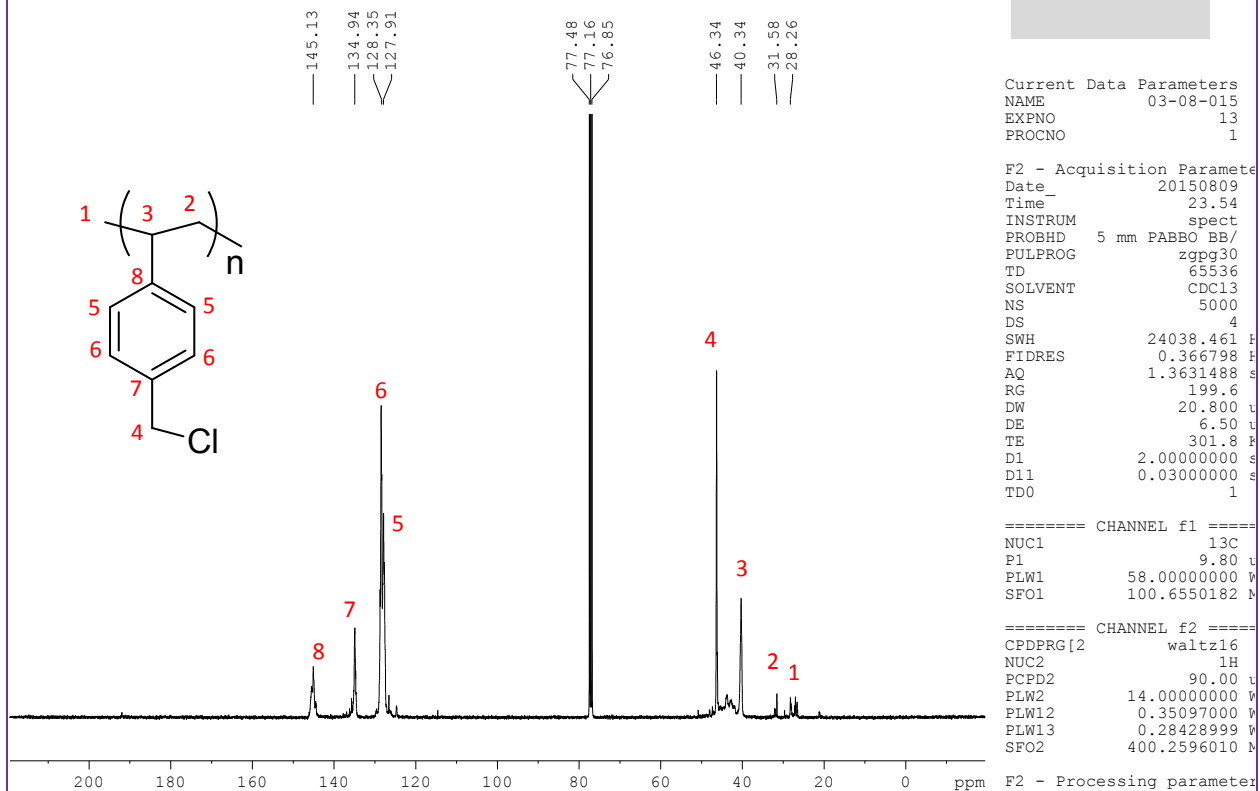


Figure S2.  $^{13}\text{C}$  NMR spectrum of poly(vinylbenzyl chloride) (1) ( $\text{CDCl}_3$ ).

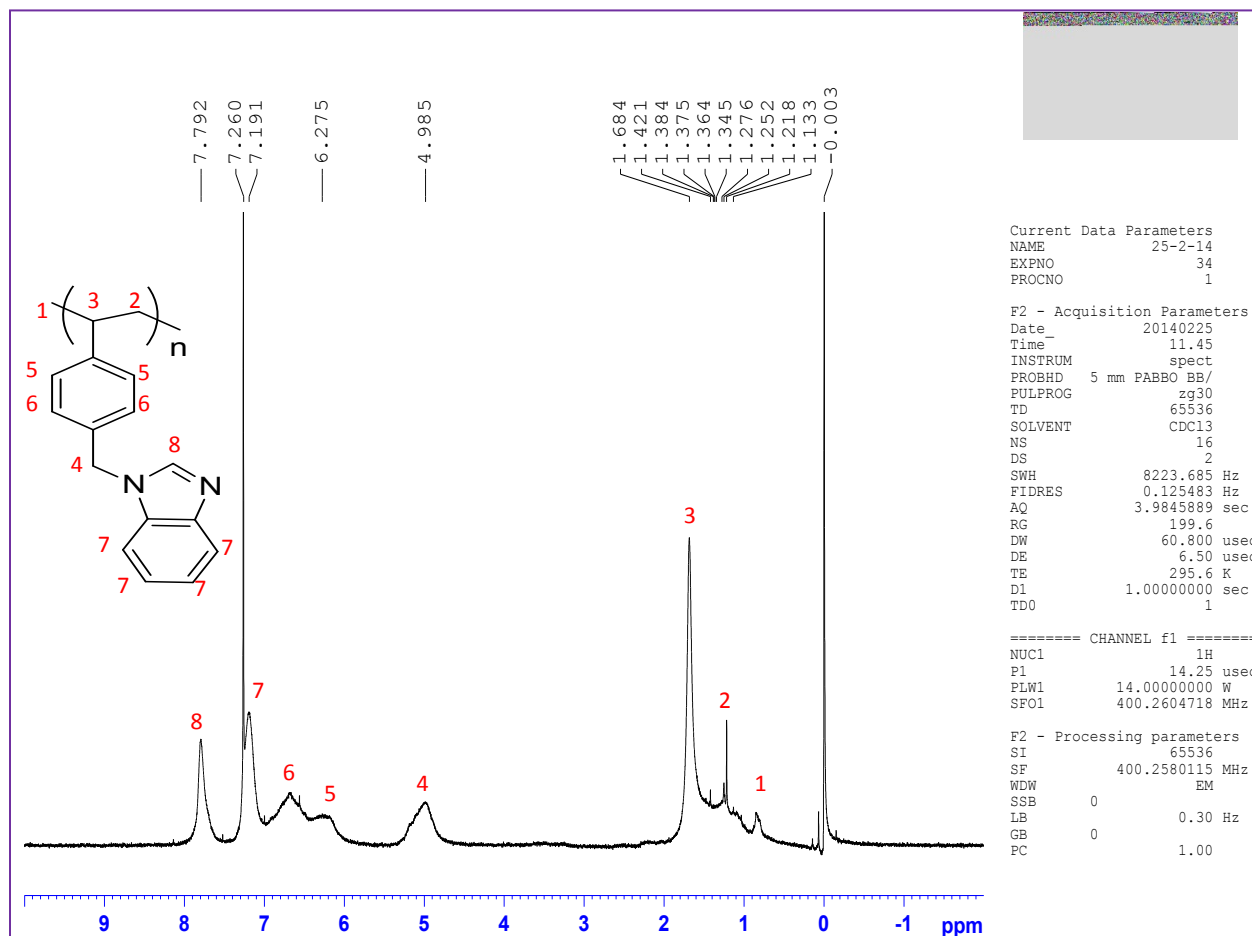


Figure S3.  $^1\text{H}$  NMR spectrum of poly-1-(4-vinylbenzyl)-1H-benzimidazole (2) ( $\text{CDCl}_3$ ).

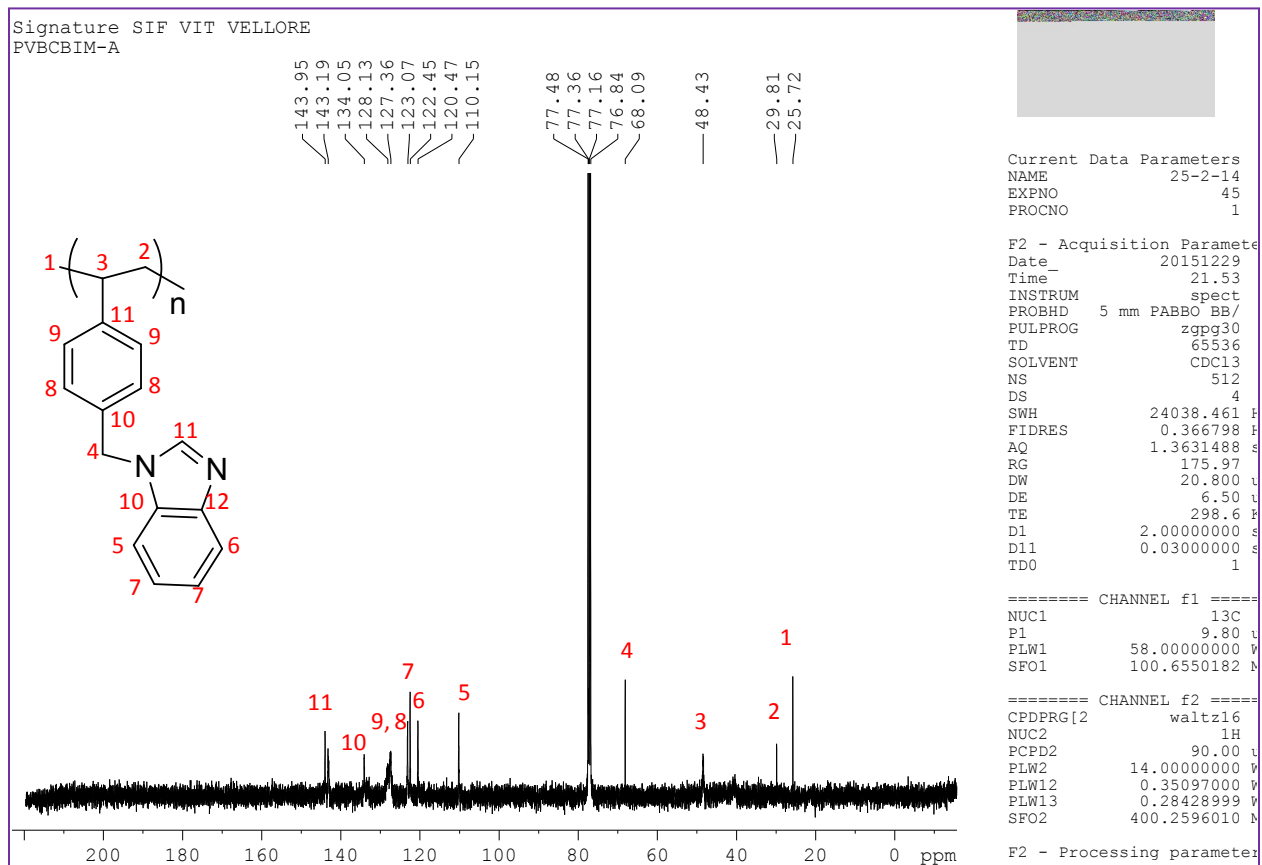
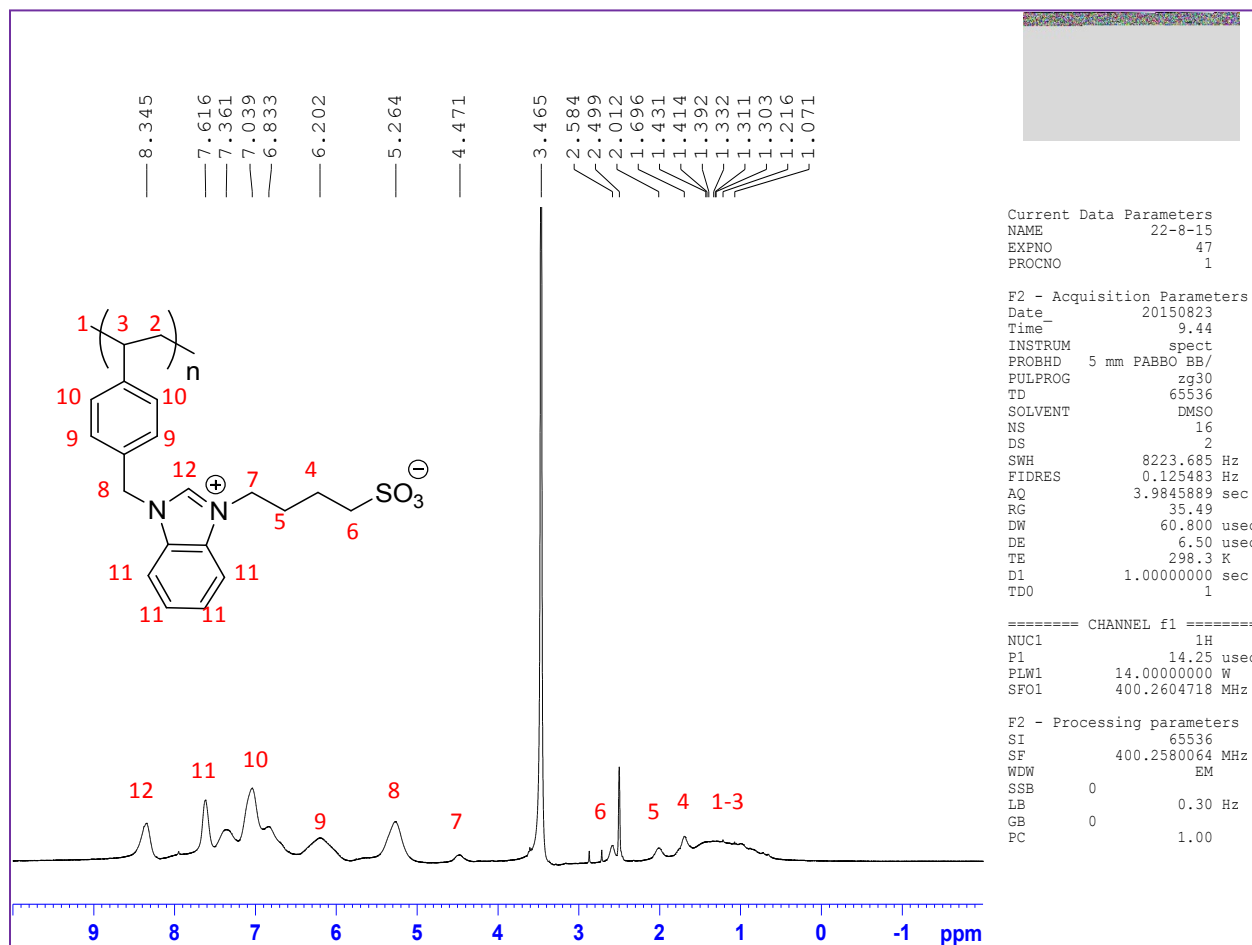
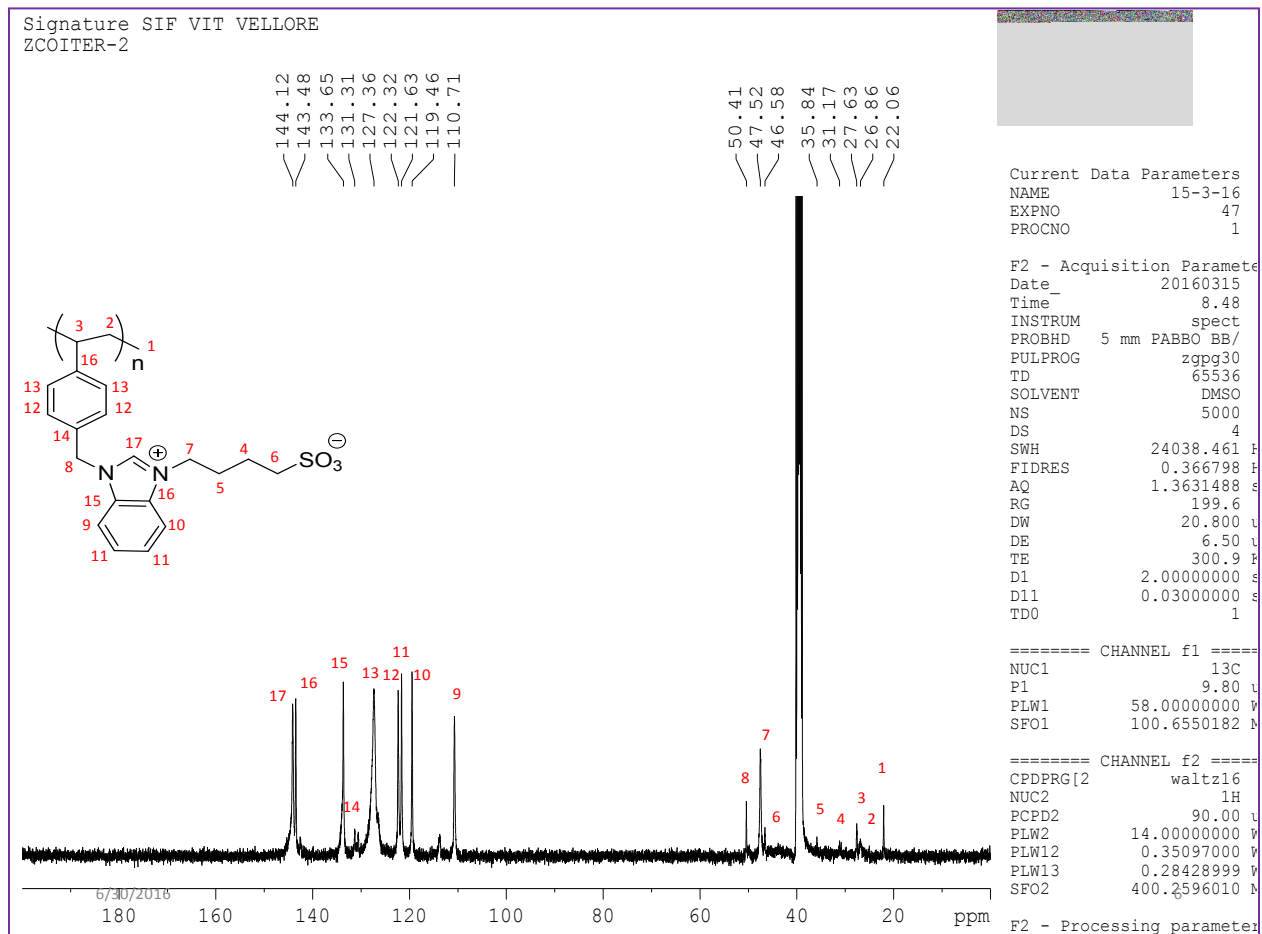


Figure S4.  $^{13}\text{C}$  NMR spectrum of poly-1-(4-vinylbenzyl)-1H-benzimidazole (2) ( $\text{CDCl}_3$ ).



**Figure S5. <sup>1</sup>H NMR spectrum of poly-(4-(1-(4-vinylbenzyl)-1H-benzimidazol-3-ium-3-yl)-butane-1-sulfonate (3) (DMSO-*d*<sub>6</sub>).**



**Figure S6.**  $^{13}\text{C}$  NMR spectrum of poly-(4-(1-(4-vinylbenzyl)-1H-benzimidazol-3-ium-3-yl)-butane-1-sulfonate (3) ( $\text{DMSO-}d_6$ ).

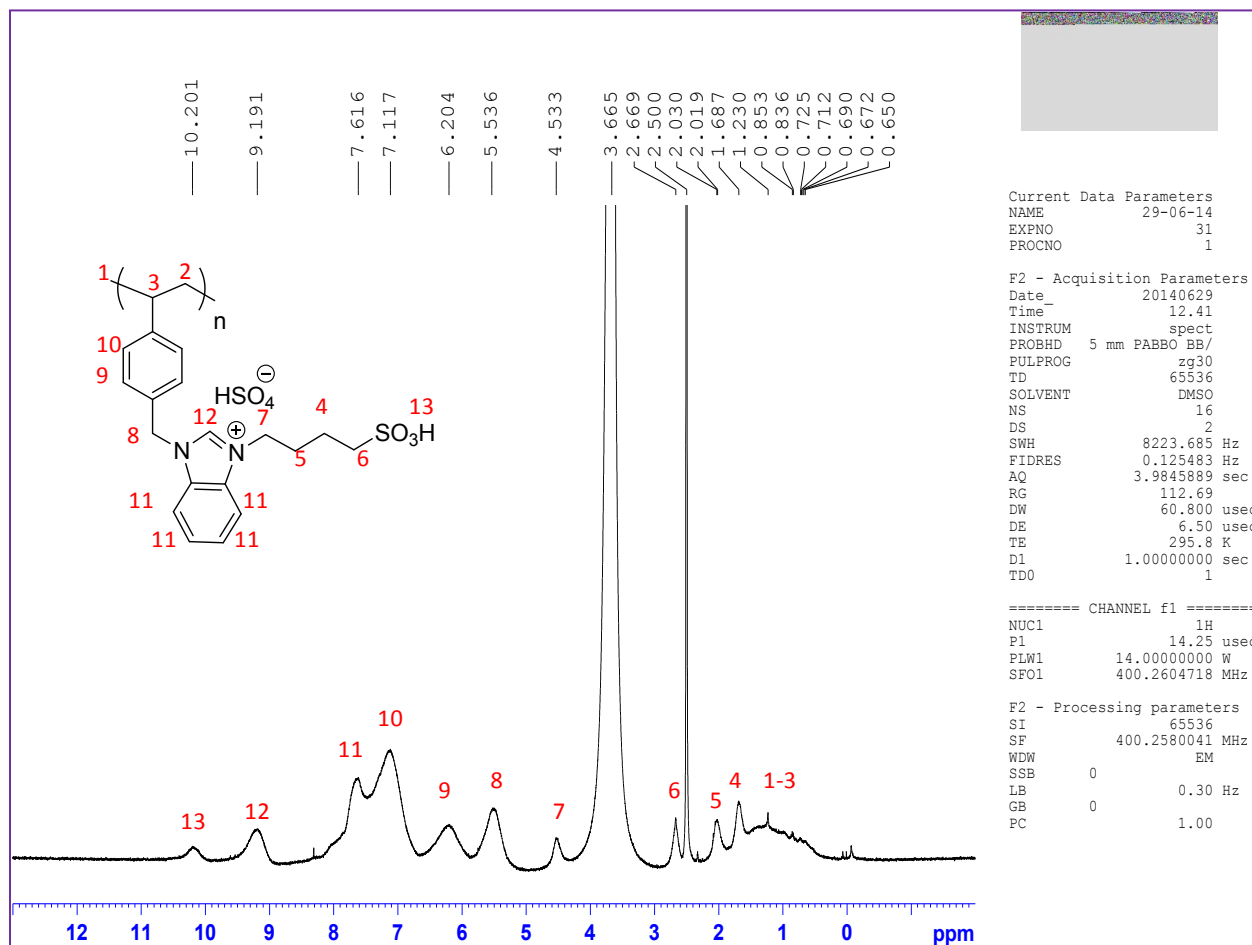
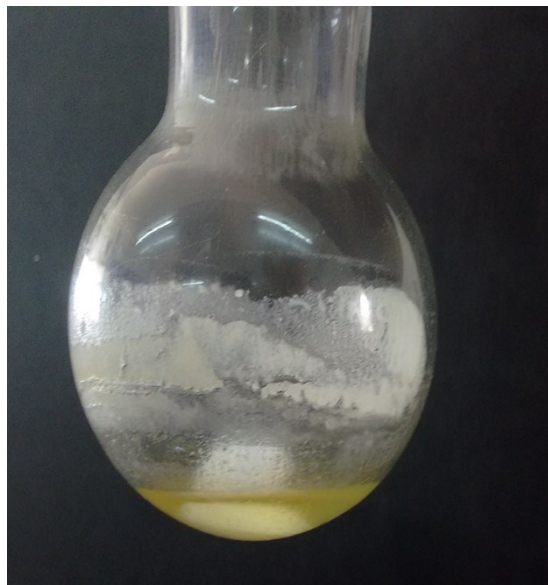


Figure S7.  $^1\text{H}$  NMR spectrum of PSBIL (4) ( $\text{DMSO}-d_6$ ).

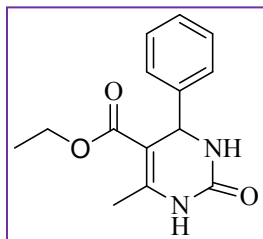




**Figure S8. Photograph showing formation of Biginelli product on the wall of RBF.**

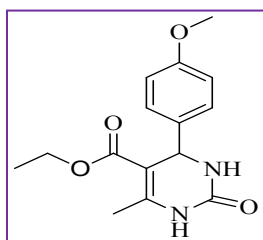
**Physical data, NMR, FT-IR and GC-MS data of the entire DHPM derivatives (4a-4x) and Monastrol.**

**5-Ethoxycarbonyl-4-phenyl-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4a).**



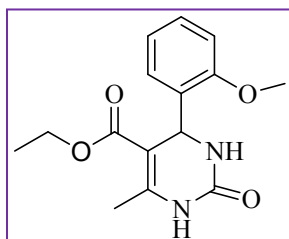
$^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  9.18 (s, 1H), 7.73 (s, 1H), 7.33-7.22 (m, 5H), 5.14 (d,  $J$  = 3.2 Hz, 1H), 4.00-3.95 (q,  $J$  = 6.8 Hz, 2H), 2.24 (s, 3H), 1.10-1.07 (t,  $J$  = 6.8 Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta$  165.36, 152.15, 148.37, 144.88, 128.41, 127.28, 126.26, 99.29, 59.21, 53.98, 17.79, 14.09. (KBr,  $\nu/\text{cm}^{-1}$ ): 3230, 3107, 3091, 2978, 2958, 2933, 1697, 1643. GC-MS; Calcd. Mass 260, found: 260. White solid; yield: 91%; mp 202-203  $^\circ\text{C}$ .

**5-Ethoxycarbonyl-4-(4-methoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4b).**



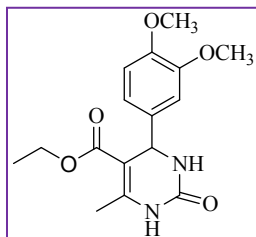
$^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  9.15 (s, 1H), 7.66 (s, 1H), 7.15-7.13 (d,  $J$  = 8.8 Hz, 2H), 6.88-6.85 (d, 2H,  $J$  = 8.8 Hz), 5.09 (d,  $J$  = 3.2 Hz, 1H), 4.00-3.94 (q, 2H,  $J$  = 6.8 Hz), 3.71 (s, 3H), 2.23 (s, 3H), 1.11-1.08 (t,  $J$  = 6.8 Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta$  165.38, 158.44, 152.16, 148.01, 137.05, 127.39, 113.70, 99.58, 59.15, 55.05, 53.33, 17.75, 14.10. (KBr,  $\nu/\text{cm}^{-1}$ ): 3230, 3101, 2980, 2956, 2929, 2910, 2818, 1720, 1701, 1645. GC-MS; Calcd. Mass 290, found: 290. Yellow solid; yield: 92%; mp 201-203  $^\circ\text{C}$ .

**5-Ethoxycarbonyl-4-(2-methoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4c).**



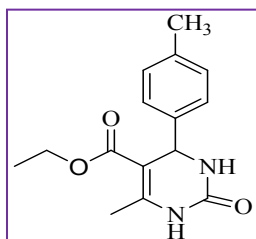
$^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  9.11 (s, 1H), 7.26 (s, 1H), 7.24-7.21 (t,  $J$  = 15.2 Hz, 1H), 7.05-7.03 (d,  $J$  = 7.6 Hz, 1H), 6.99-6.96 (d,  $J$  = 8.4 Hz, 1H), 6.88-6.85 (t,  $J$  = 14.8 Hz, 1H) 5.71 (d,  $J$  = 2.8 Hz, 1H), 4.19 (q,  $J$  = 7.1 Hz, 2H), 4.01 (s, 3H), 2.49 (s, 3H), 1.26-1.22 (t,  $J$  = 7.2 Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta$  165.32, 156.52, 152.16, 148.76, 131.62, 128.62, 127.05, 120.12, 111.13, 97.61, 58.93, 55.33, 48.90, 17.67, 13.98. (KBr,  $\nu/\text{cm}^{-1}$ ): 3224, 3105, 2956, 2939, 2818, 1697, 1635. GC-MS; Calcd. Mass 290, found: 290. Light yellow solid; yield: 90%; mp 253-255  $^\circ\text{C}$ .

**5-Ethoxycarbonyl-4-(3,4-dimethoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4d).**



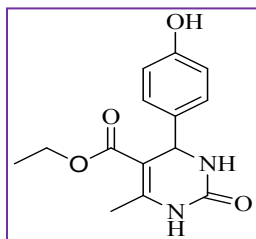
$^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  9.15 (s, 1H), 7.67 (s, 1H), 6.89-6.87 (d, 1H,  $J$  = 8 Hz), 6.84 (d,  $J$  = 1.6 Hz, 1H), 6.73-6.71 (dd, 1H,  $J$  = 2 Hz), 5.10-5.09 (d, 2H,  $J$  = 3.2 Hz), 4.02-3.96 (q, 2H,  $J$  = 7.14 Hz), 3.71 (s, 6H), 2.24 (s, 3H), 1.13-1.09 (t, 3H, 7.08 Hz).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta$  165.47, 159.63, 152.29, 148.51, 148.08, 137.37, 117.94, 111.79, 110.50, 99.43, 59.22, 55.57, 53.50, 17.77, 14.18. (KBr,  $\nu/\text{cm}^{-1}$ ): 3244, 3103, 2954, 2931, 1707, 1653. GC-MS; Calcd. Mass 320, found: 320. White solid; yield: 86%; mp 138-142  $^\circ\text{C}$ .

**5-Ethoxycarbonyl-4-(4-methylphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4e).**



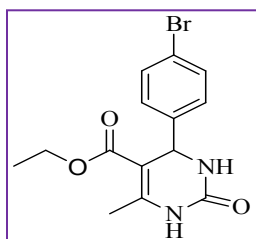
$^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  9.16 (s, 1H), 7.68 (s, 1H), 7.12-7.10 (d, 4H,  $J$  = 4.8 Hz), 5.10 (s, 1H), 3.99-3.94 (q,  $J$  = 6.4 Hz, 2H), 2.24 (s, 6H), 1.11-1.08 (t,  $J$  = 5.6 Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta$  165.37, 152.21, 148.14, 141.96, 136.37, 128.89, 126.16, 99.45, 59.16, 53.65, 20.64, 17.76, 14.09. (KBr,  $\nu/\text{cm}^{-1}$ ): 3232, 3113, 2980, 2922, 2816, 1699, 1645. GC-MS; Calcd. Mass 274, found: 274. White solid; yield: 89%; mp 204-206  $^\circ\text{C}$ .

**5-Ethoxycarbonyl-4-(4-hydroxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4f).**



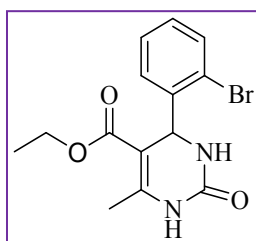
$^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  9.29 (s, 1H), 9.06 (s, 1H), 7.57 (s, 1H), 7.03-7.01 (d,  $J$  = 7.6 Hz, 2H), 6.69-6.67 (d,  $J$  = 7.6 Hz, 2H), 5.04 (s, 1H), 4.00-3.95 (q,  $J$  = 6.4 Hz, 2H), 2.22 (s, 3H), 1.11-1.07 (t,  $J$  = 6.8 Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta$  165.38, 156.49, 152.11, 147.68, 135.40, 127.34, 114.93, 99.73, 59.04, 53.40, 17.68, 14.05. (KBr,  $\nu/\text{cm}^{-1}$ ): 3504, 3271, 3115, 2981, 1680, 1637. GC-MS; Calcd. Mass 276, found: 276. Rosy red solid; mp yield: 88%; 231-252  $^\circ\text{C}$ .

#### 5-Ethoxycarbonyl-4-(4-bromophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4g).



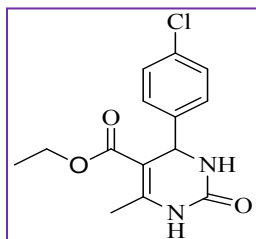
$^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  9.23 (s, 1H), 7.75 (s, 1H), 7.53-7.51 (d,  $J$  = 8.4 Hz, 2H), 7.19-7.17 (d,  $J$  = 8.4 Hz, 2H), 5.12 (d,  $J$  = 3.2 Hz, 1H), 4.00-3.95 (q,  $J$  = 7.2 Hz, 2H), 2.24 (s, 3H), 1.11-1.07 (t,  $J$  = 7.2 Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta$  165.18, 151.89, 148.70, 144.18, 131.29, 128.53, 120.28, 98.76, 59.24, 53.47, 17.78, 14.05. (KBr,  $\nu/\text{cm}^{-1}$ ): 3228, 3221, 3101, 2972, 2922, 2818, 1697, 1643. GC-MS; Calcd. Mass 338, found: 338. Yellow solid; yield: 81%; mp 193-195  $^\circ\text{C}$ .

#### 5-Ethoxycarbonyl-4-(2-bromophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4h).



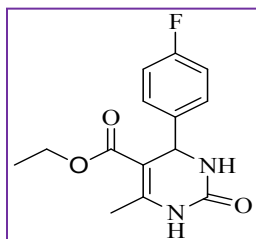
$^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  9.26 (s, 1H), 7.66 (s, 1H), 7.57-7.55 (d,  $J$  = 8 Hz, 1H), 7.37-7.34 (t,  $J$  = 14.8 Hz, 2H), 7.31-7.30 (d,  $J$  = 6.8 Hz, 1H), 7.20-7.16 (t,  $J$  = 14.8 Hz, 1H), 5.61 (d,  $J$  = 2 Hz, 1H), 3.91-3.86 (q,  $J$  = 7.2 Hz, 2H), 2.30 (s, 3H), 1.00-0.97 (t,  $J$  = 7.2 Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta$  164.93, 151.23, 149.23, 143.35, 132.57, 129.35, 128.74, 128.41, 122.25, 98.24, 59.03, 54.00, 17.62, 13.95. (KBr,  $\nu/\text{cm}^{-1}$ ): 3340, 3217, 3107, 2976, 1687, 1635. GC-MS; Calcd. Mass 338, found: 338. White solid; yield: 80%; mp 290-291  $^\circ\text{C}$ .

**5-Ethoxycarbonyl-4-(4-chlorophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4i).**



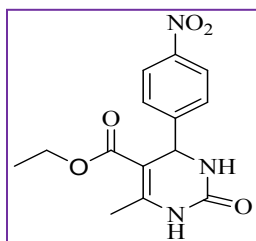
$^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  9.21 (s, 1H), 7.74 (s, 1H), 7.40-7.38 (d,  $J$  = 8 Hz, 2H), 7.25-7.23 (d,  $J$  = 8 Hz, 2H), 5.14 (d,  $J$  = 2.8 Hz, 1H), 4.01-3.95 (q,  $J$  = 6.8 Hz, 2H), 2.24 (s, 3H), 1.11-1.07 (t,  $J$  = 7.2 Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta$  165.19, 151.89, 148.68, 143.78, 131.75, 128.36, 90.83, 59.22, 53.40, 17.77, 14.05. (KBr,  $\nu/\text{cm}^{-1}$ ): 3228, 3105, 3091, 2931, 2908, 1699, 1645. GC-MS; Calcd. Mass 294, found: 294. White solid; yield: 88%; mp 193-194  $^\circ\text{C}$ .

**5-Ethoxycarbonyl-4-(4-fluorophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4j).**



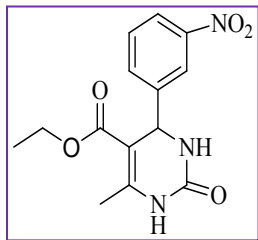
$^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  9.19 (s, 1H), 7.72 (s, 1H), 7.28-7.25 (t,  $J$  = 6.8 Hz, 2H), 7.16-7.12 (t,  $J$  = 8 Hz, 2H), 5.15 (s, 1H), 4-3.95 (q,  $J$  = 6.8 Hz, 2H), 2.25 (s, 3H), 1.10-1.07 (t,  $J$  = 6.8 Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta$  165.21, 162.48, 160.07, 151.93, 148.44, 141.10, 128.23, 115.15, 99.13, 59.15, 53.32, 17.73, 14.00. (KBr,  $\nu/\text{cm}^{-1}$ ): 3232, 3115, 2978, 1697, 1643. GC-MS; Calcd. Mass 278, found: 278. White solid; 80%; mp 185-186  $^\circ\text{C}$ .

**5-Ethoxycarbonyl-4-(4-nitrophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4k).**



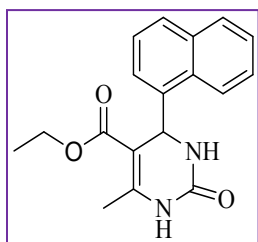
$^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  9.35 (s, 1H), 8.22-8.20 (d,  $J$  = 8.8 Hz, 2H), 7.88 (s, 1H), 7.51-7.49 (d,  $J$  = 8.8 Hz, 2H), 5.27 (d,  $J$  = 3.2 Hz, 1H), 4.01-3.95 (q,  $J$  = 7.08 Hz, 2H), 2.26 (s, 3H), 1.11-1.07 (t,  $J$  = 7.08 Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta$  165.04, 151.98, 151.72, 149.36, 146.71, 127.64, 123.80, 98.18, 59.37, 53.67, 17.84, 14.02. (KBr,  $\nu/\text{cm}^{-1}$ ): 3224, 3109, 2918, 2848, 1697, 1641. GC-MS; Calcd. Mass 305, found: 305. Yellow solid; yield: 78%; mp 216-217  $^\circ\text{C}$ .

**5-Ethoxycarbonyl-4-(3-nitrophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4l).**



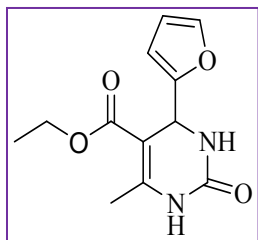
$^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  9.33 (s, 1H), 8.08 (s, 1H), 8.16 (s, 1H), 8.14-8.12(d, J = 7.72 Hz, 1H), 7.70-7.69 (d, J = 7.28 Hz, 1H), 7.67-7.63 (t, J = 15.4 Hz, 1H), 5.30 (s, 1H), 4.01-3.94 (q, J = 6.4 Hz, 2H), 2.27 (s, 3H), 1.11-1.08 (t, J = 7.2 Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta$  166.03, 151.73, 149.73, 147.73, 146.96, 132.94, 130.19, 122.30, 120.96, 98.32, 59.34, 53.53, 17.81, 13.97. (KBr,  $\nu/\text{cm}^{-1}$ ): 3323, 3215, 3089, 2960, 2819, 1707, 1685. GC-MS; Calcd. Mass 305, found: 305. Light yellow solid; yield: 68%; mp 233-235  $^\circ\text{C}$ .

**5-Ethoxycarbonyl-4-(naphthalene-2-yl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4m).**



$^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  9.24 (s, 1H), 8.31-8.29 (d, J = 8.4 Hz, 1H), 7.94-7.74 (m, 3H), 7.59-7.39 (m, 4H), 6.05-6.04 (d, J = 4 Hz, 1H), 3.82-3.77 (q, J = 6.8 Hz, 2H), 2.35 (s, 3H), 0.82-0.79 (t, J = 6.8 Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta$  165.27, 157.29, 151.62, 148.69, 140.41, 133.45, 130.05, 128.42, 127.87, 126.00, 125.69, 125.61, 124.19, 123.63, 99.12, 58.99, 49.77, 17.75, 13.80. (KBr,  $\nu/\text{cm}^{-1}$ ): 3240, 3105, 2922, 1695, 1645. GC-MS; Calcd. Mass 310, found: 310. Yellow solid; yield: 88%; mp 245-247  $^\circ\text{C}$ .

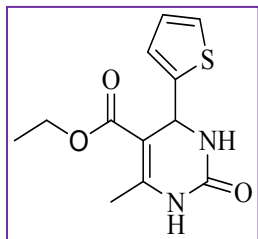
**5-Ethoxycarbonyl-4-(2-furyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4n).**



$^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  9.23 (s, 1H), 7.75 (s, 1H) 7.54 (s, 1H, J = 2.42 Hz), 6.34 (s, 1H), 6.09-6.08 (d, J = 3.2 Hz, 1H), 5.20 (d, J = 3.2 Hz, 1H), 4.03-4.01 (q, J = 2 Hz, 2H), 2.22 (s, 3H), 1.15-1.11 (t, J = 7.2 Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta$  165.01, 155.94, 152.41,

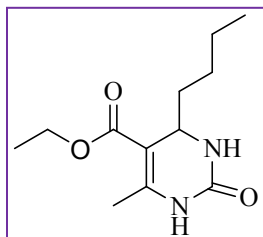
149.34, 142.13, 110.34, 105.27, 96.76, 59.23, 47.72, 17.72, 14.14. (KBr,  $\nu/\text{cm}^{-1}$ ): 3234, 3099, 2972, 2939, 1701, 1647. GC-MS; Calcd. Mass 250, found: 250. Grey solid; yield: 84%; mp 205-208 °C.

**5-Ethoxycarbonyl-4-(2-thiophene)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4o).**



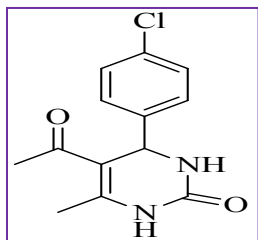
$^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ):  $\delta$  9.31 (s, 1H), 7.90 (s, 1H), 7.35-7.34 (d,  $J = 5.2$  Hz, 1H), 6.93-6.88 (dd,  $J = 17.24, 3.2$  Hz, 2H), 5.41 (d,  $J = 3.6$  Hz, 1H), 4.08-4.03 (q,  $J = 7$  Hz, 2H), 2.21 (s, 3H), 1.18-1.14 (t,  $J = 7.2$  Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-d}_6$ ):  $\delta$  165.02, 152.23, 148.79, 148.65, 126.66, 124.63, 123.50, 99.78, 59.35, 49.35, 17.68, 14.15. (KBr,  $\nu/\text{cm}^{-1}$ ): 3329, 2336, 3109, 2978, 2909, 1695, 1647. GC-MS; Calcd. Mass 266, found: 266. Light Yellow solid; yield: 82%; mp 207-209 °C.

**4-n-Butyl-5-Ethoxycarbonyl-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4p).**



$^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ):  $\delta$  8.92 (s, 1H), 7.32 (s, 1H), 4.10 (t,  $J = 3.64$  Hz, 1H), 4.07-4.03 (m, 2H), 2.15 (s, 3H), 1.38-1.31 (m, 6H), 1.22 (t, 3H,  $J = 3.56$  Hz), 1.20 (t,  $J = 7.16$  Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-d}_6$ ):  $\delta$  165.46, 152.81, 148.26, 99.44, 59.04, 49.80, 18.18, 17.69, 17.00, 14.33, 14.21, 13.75. (KBr,  $\nu/\text{cm}^{-1}$ ): 3348, 3242, 3113, 2931, 2872, 1718, 1699. GC-MS; Calcd. Mass 240, found: 252. White solid; yield: 56%; mp 156-158 °C.

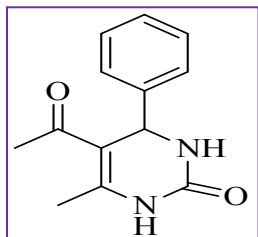
**5-Aceto-6-methyl-4-(4-chlorophenyl)-3,4-dihydropyrimidin-2(1H)-one (4q).**



$^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ):  $\delta$  9.22 (s, 1H), 7.85 (s, 1H), 7.39-7.37 (d,  $J = 8.4$  Hz, 2H), 7.26-7.23 (d, 2H,  $J = 8.8$  Hz), 5.25-5.24 (d,  $J = 3.6$  Hz, 1H), 2.28 (s, 3H), 2.12 (s, 3H).  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-d}_6$ ):  $\delta$  194.09, 152.01, 148.42, 143.18, 131.81, 128.44, 128.29, 109.50, 53.06,

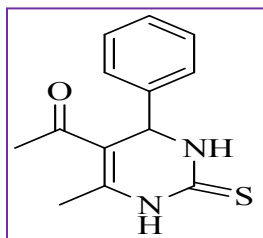
30.39, 18.94. (KBr,  $\nu/\text{cm}^{-1}$ ): 3284, 3118, 2918, 1699, 1678. GC-MS; Calcd. Mass 264, found: 264. Yellow solid; yield: 88%; mp 215-218 °C.

**5-Aceto-6-methyl-4-phenyl-3,4-dihydropyrimidin-2(1H)-one (4r).**



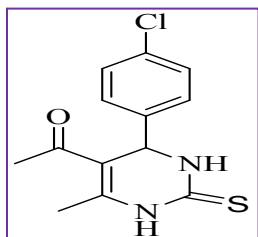
$^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ):  $\delta$  9.18 (s, 1H), 7.83 (s, 1H), 7.34-7.22 (m, 5H), 5.26-5.25 (d,  $J = 3.6$  Hz, 1H), 2.29 (s, 3H), 2.10 (s, 3H).  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-d}_6$ ):  $\delta$  194.28, 152.16, 148.13, 144.25, 128.53, 127.35, 126.44, 109.60, 53.83, 30.32, 18.92. (KBr,  $\nu/\text{cm}^{-1}$ ): 3327, 3255, 3118, 1747, 1701, 1674. GC-MS; Calcd. Mass 230, found: 230. Orange solid; yield: 89%; mp 227-229 °C.

**5-Acetyl-6-methyl-4-phenyl-3,4-dihydropyrimidin-2(1H)-thione (4s).**



$^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ):  $\delta$  10.27 (s, 1H), 9.75 (s, 1H), 7.45-7.21 (m, 5H), 5.29-5.28 (d,  $J = 4$  Hz, 1H), 2.33 (s, 3H), 2.15 (s, 3H).  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-d}_6$ ):  $\delta$  194.78, 174.09, 144.56, 142.91, 128.64, 127.70, 126.56, 110.47, 53.77, 30.42, 18.25. (KBr,  $\nu/\text{cm}^{-1}$ ): 3275, 3174, 2970, 1737, 1610. GC-MS; Calcd. Mass 246, found: 246. Yellowish orange solid; yield: 85; mp 225-228 °C.

**5-Aceto-6-methyl-4-(4-chlorophenyl)-3,4-dihydropyrimidin-2(1H)-thione (4t).**

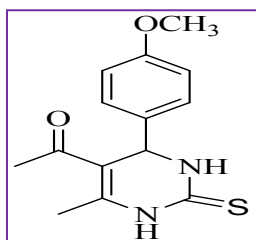


$^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ):  $\delta$  10.33 (s, 1H), 9.77 (s, 1H), 7.42-7.40 (d,  $J = 8.4$  Hz, 2H), 7.24-7.22 (d,  $J = 8.8$  Hz, 2H), 5.29-5.28 (d,  $J = 4$  Hz, 1H), 2.33 (s, 3H), 2.17 (s, 3H).  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-d}_6$ ):  $\delta$  194.65, 174.22, 144.89, 141.81, 132.24, 131.17, 128.61,



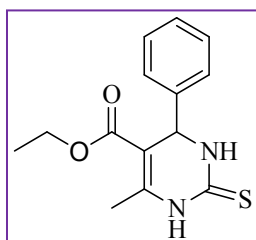
110.34, 53.03, 30.50, 18.29. (KBr,  $\nu/\text{cm}^{-1}$ ): 3271, 3172, 3099, 2981, 2918, 1618, 1566. GC-MS; Calcd. Mass 280, found: 280. Deep yellow solid; yield: 84%; mp 193-194 °C.

**5-Acetyl-6-methyl-4-(4-methoxyphenyl)-3,4-dihydropyrimidin-2(1H)-thione (4u).**



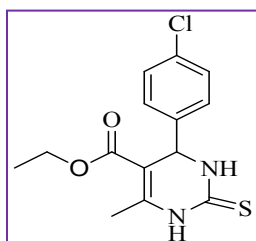
$^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  10.23 (s, 1H), 9.69 (s, 1H) 7.15-7.13 (d,  $J = 8.4$  Hz, 2H), 6.91-6.88 (d,  $J = 8.8$  Hz, 2H), 5.23-5.22 (d,  $J = 3.6$  Hz, 1H), 3.72 (s, 3H), 2.31 (s, 3H), 2.11 (s, 3H).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta$  194.86, 173.79, 158.75, 144.21, 135.05, 127.83, 113.96, 110.43, 55.09, 55.30, 30.23, 18.15. (KBr,  $\nu/\text{cm}^{-1}$ ): 3305, 3228, 3001, 2835, 1564, 1508. GC-MS; Calcd. Mass 276, found: 276. Grey solid; yield: 88%; mp 156-158 °C.

**5-Ethoxycarbonyl-4-phenyl-6-methyl-3,4-dihydropyrimidin-2(1H)-thione (4v).**



$^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  10.32 (s, 1H), 9.65 (s, 1H), 7.36-7.20 (m, 5H), 5.17 (d,  $J = 2$  Hz, 1H), 4.03-3.98 (q,  $J = 6.4$  Hz, 2H), 2.29 (s, 3H), 1.11-1.08 (t,  $J = 6.8$  Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta$  174.21, 165.12, 145.01, 143.48, 128.56, 127.68, 126.38, 100.72, 59.59, 54.03, 17.15, 14.00. (KBr,  $\nu/\text{cm}^{-1}$ ): 3321, 3172, 3103, 2976, 1739, 1664. GC-MS; Calcd. Mass 276, found: 276. Yellow solid; yield: 85%; mp 203-205 °C.

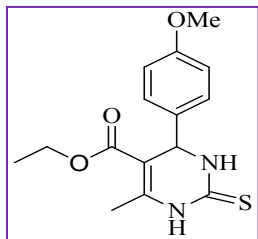
**5-Ethoxycarbonyl-4(4-chlorophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-thione (4w).**



$^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ):  $\delta$  10.37 (s, 1H), 9.66 (s, 1H), 7.42-7.40 (d,  $J = 8.4$  Hz, 2H), 7.24-7.22 (d,  $J = 8.4$  Hz, 2H), 5.17-5.16 (d,  $J = 3.2$  Hz, 1H), 4.03-3.98 (q,  $J = 6$  Hz, 2H), 2.29 (s, 3H), 1.11-1.07 (t,  $J = 7.2$  Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ):  $\delta$  174.26, 164.98, 145.35,

142.37, 132.26, 131.12, 128.30, 100.30, 59.64, 53.45, 17.17, 13.98. (KBr,  $\nu/\text{cm}^{-1}$ ): 3323, 3172, 3099, 2981, 2920, 1688, 1570. GC-MS; Calcd. Mass 310, found: 310. Yellow solid; yield: 84%; mp 192-195 °C.

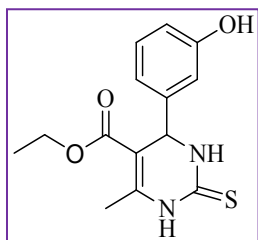
**5-Ethoxycarbonyl-4-(4-methoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-thione (4x).**



$^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ):  $\delta$  10.28 (s, 1H), 9.59 (s, 1H), 7.13-7.11 (d,  $J = 8.8$  Hz, 1H), 6.90-6.88 (d,  $J = 8.4$  Hz, 1H), 5.11-5.10 (d,  $J = 3.6$  Hz, 1H), 4.02-3.97 (q,  $J = 6.8$  Hz, 2H), 3.72 (s, 3H), 2.28 (s, 3H), 1.12-1.08 (t,  $J = 6.8$  Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-d}_6$ ):  $\delta$  174.02, 165.16, 158.73, 144.73, 135.69, 127.60, 113.87, 100.96, 59.54, 55.09, 53.43, 17.12, 14.03. (KBr,  $\nu/\text{cm}^{-1}$ ): 3309, 3167, 3103, 2981, 2900, 1662, 1571. GC-MS; Calcd. Mass 306, found: 306. Yellow solid; yield: 87%; mp 154-158 °C.

**Physical data, NMR, FT-IR and GC-MS data of Monastrol.**

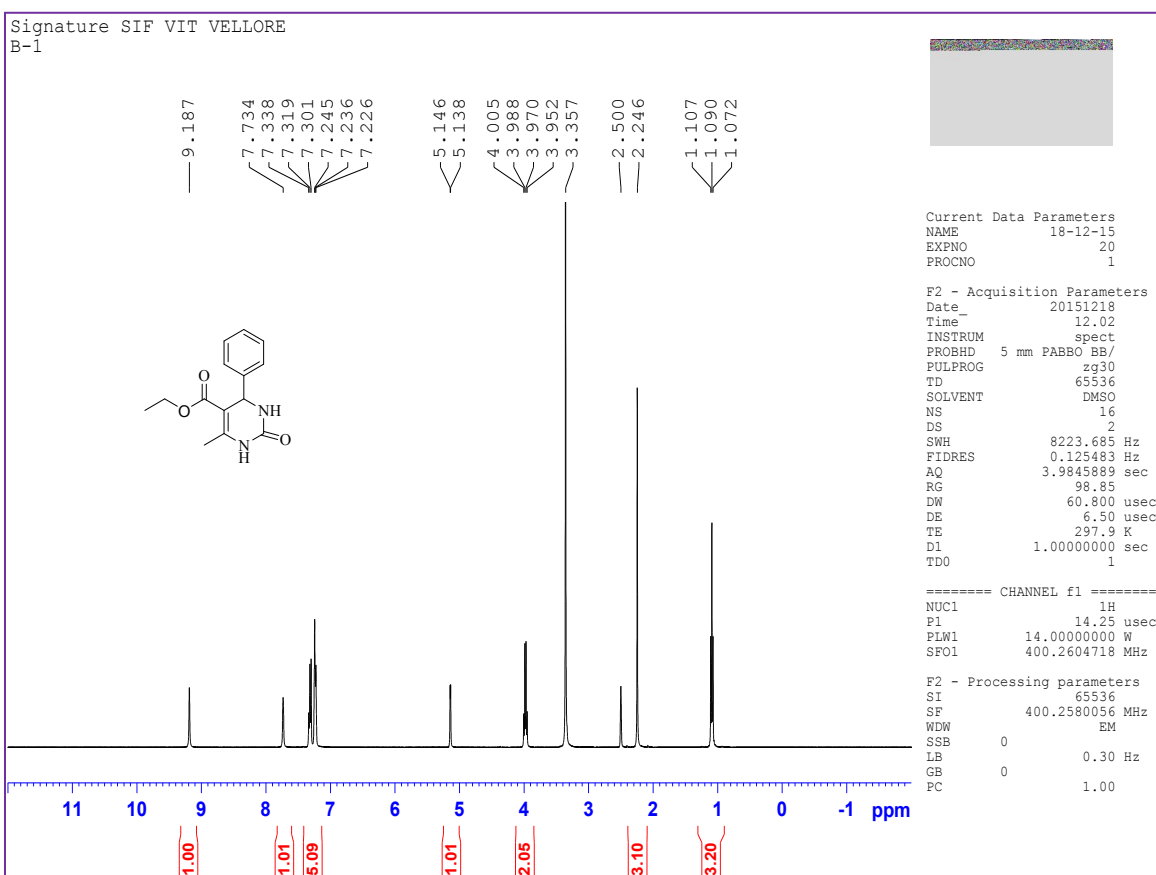
**5-Ethoxycarbonyl-4-(3-hydroxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-thione (Monastrol).**



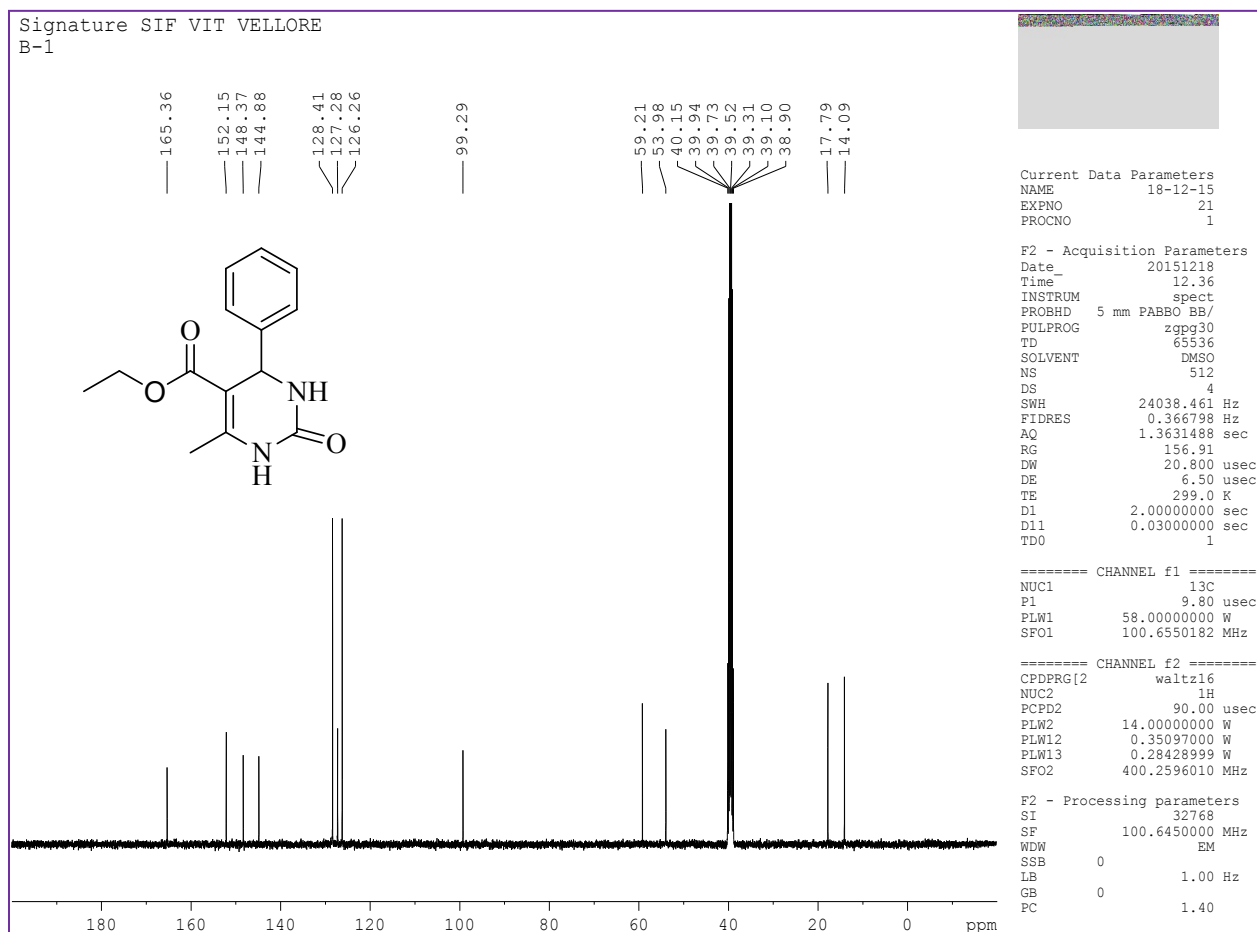
$^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ):  $\delta$  10.29 (s, 1H), 9.60 (s, 1H), 9.44 (s, 1H), 7.24-6.94 (m, 1H), 6.90-6.63 (m, 3H), 5.08 (s, 1H), 4.04-3.99 (q,  $J = 6.8$  Hz, 2H), 2.27 (s, 3H), 1.13-1.09 (t,  $J = 6.8$  Hz, 3H).  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-d}_6$ ):  $\delta$  174.20, 165.22, 157.63, 157.47, 144.86, 129.52, 117.03, 114.64, 113.27, 100.82, 59.63, 53.97, 17.18, 14.06. (KBr,  $\nu/\text{cm}^{-1}$ ): 3280, 3199, 2980, 1689, 1566. GC-MS; Calcd. Mass 292 found: 290; Yellow solid; yield: 20%; mp 186-189 °C.

Copies of  $^1\text{H}$  and  $^{13}\text{C}$  NMR, FT-IR and GC-MS spectra of as-synthesized 3,4-dihydropyrimidine-2(1*H*)-ones/thiones.

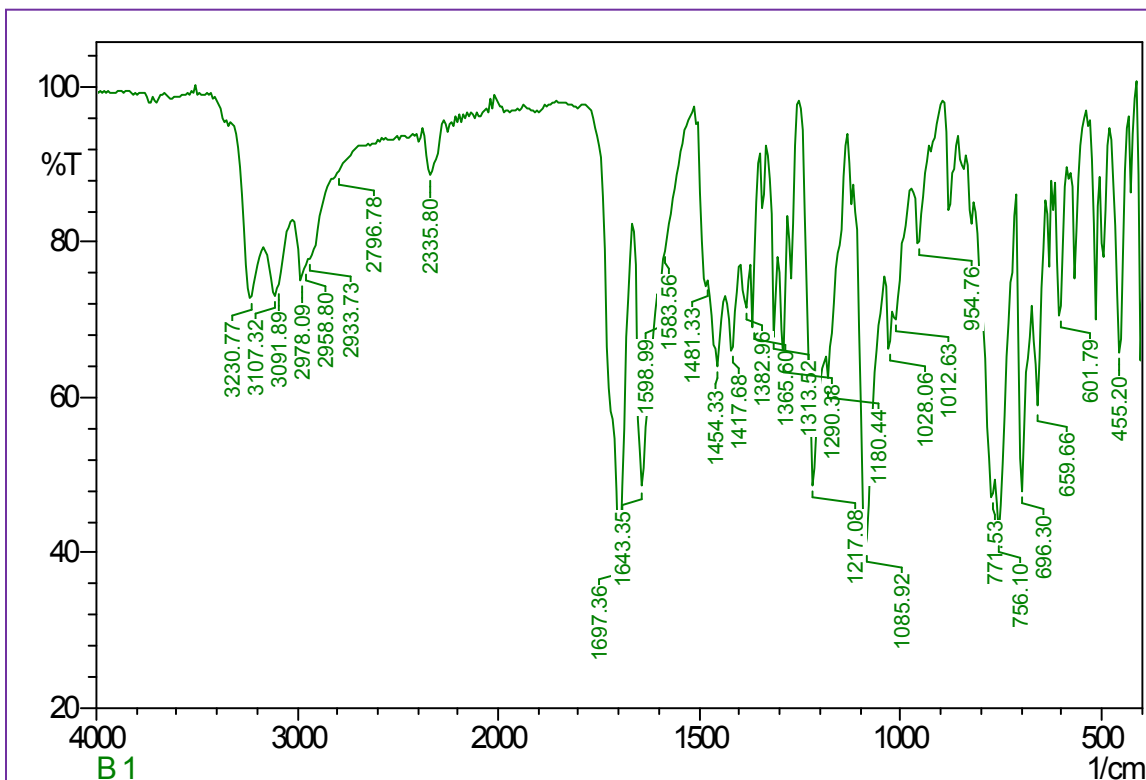
1) 5-Ethoxycarbonyl-4-phenyl-6-methyl-3,4-dihydropyrimidin-2(1*H*)-one (4a).



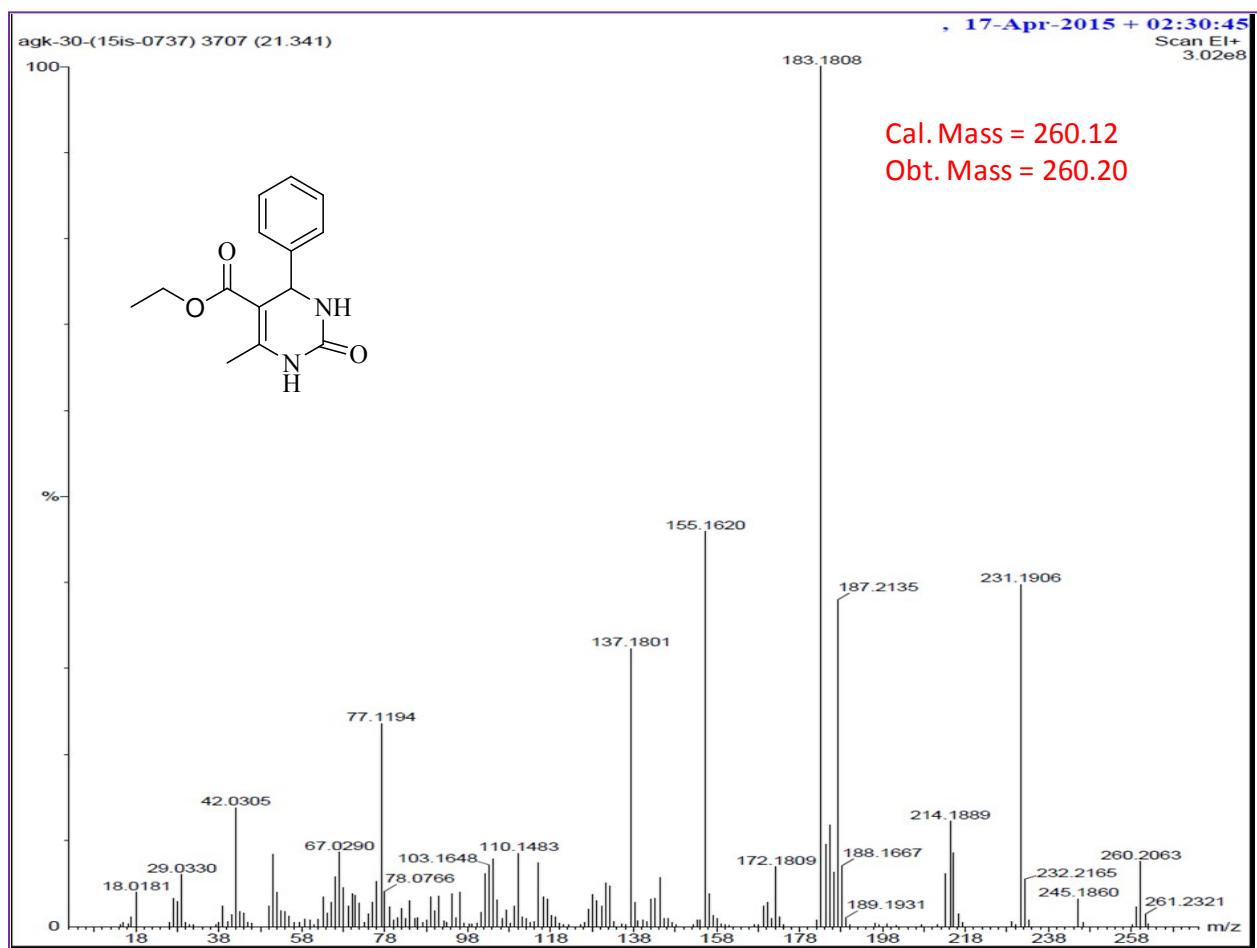
1) 5-Ethoxycarbonyl-4-phenyl-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4a).



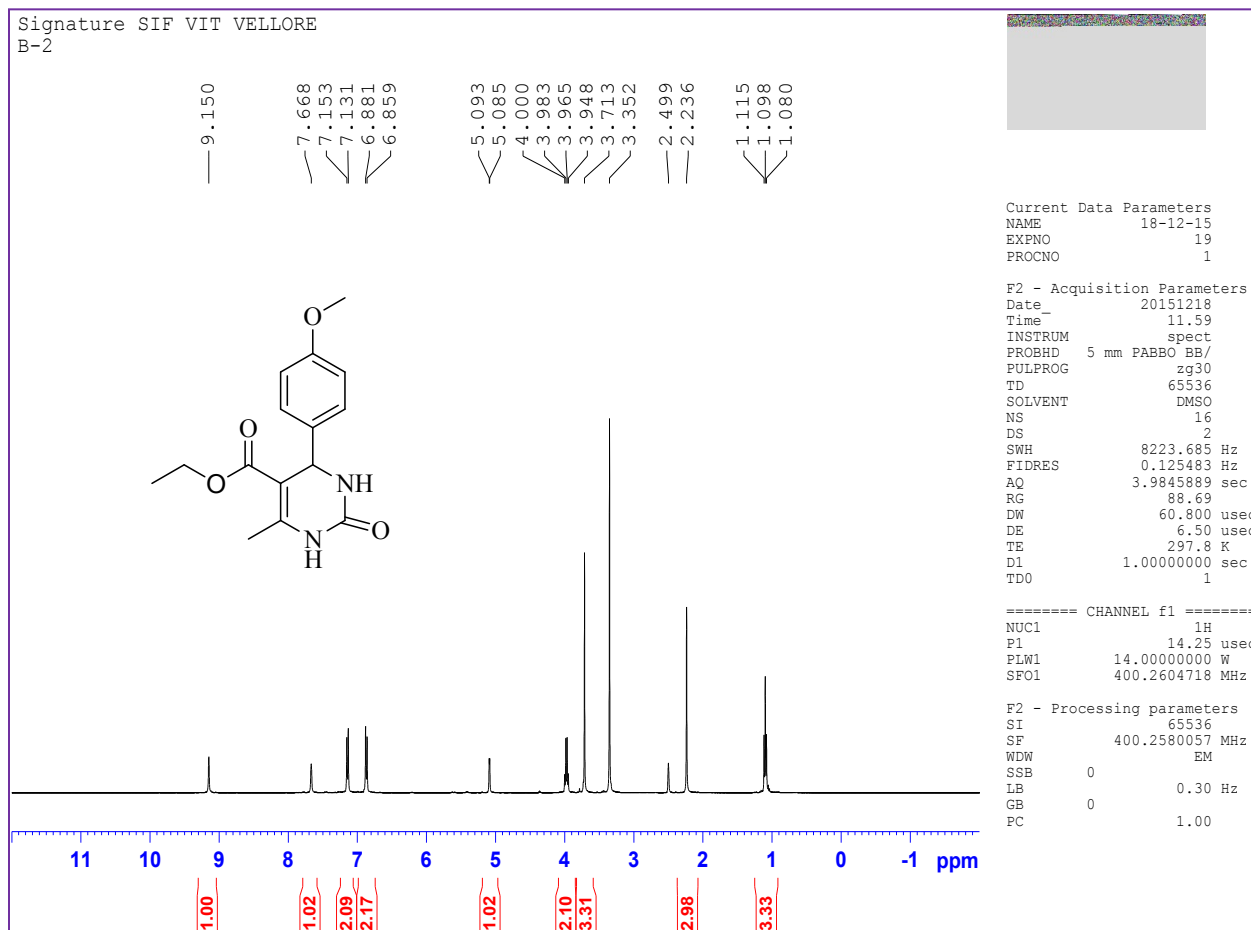
1) 5-Ethoxycarbonyl-4-phenyl-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4a).



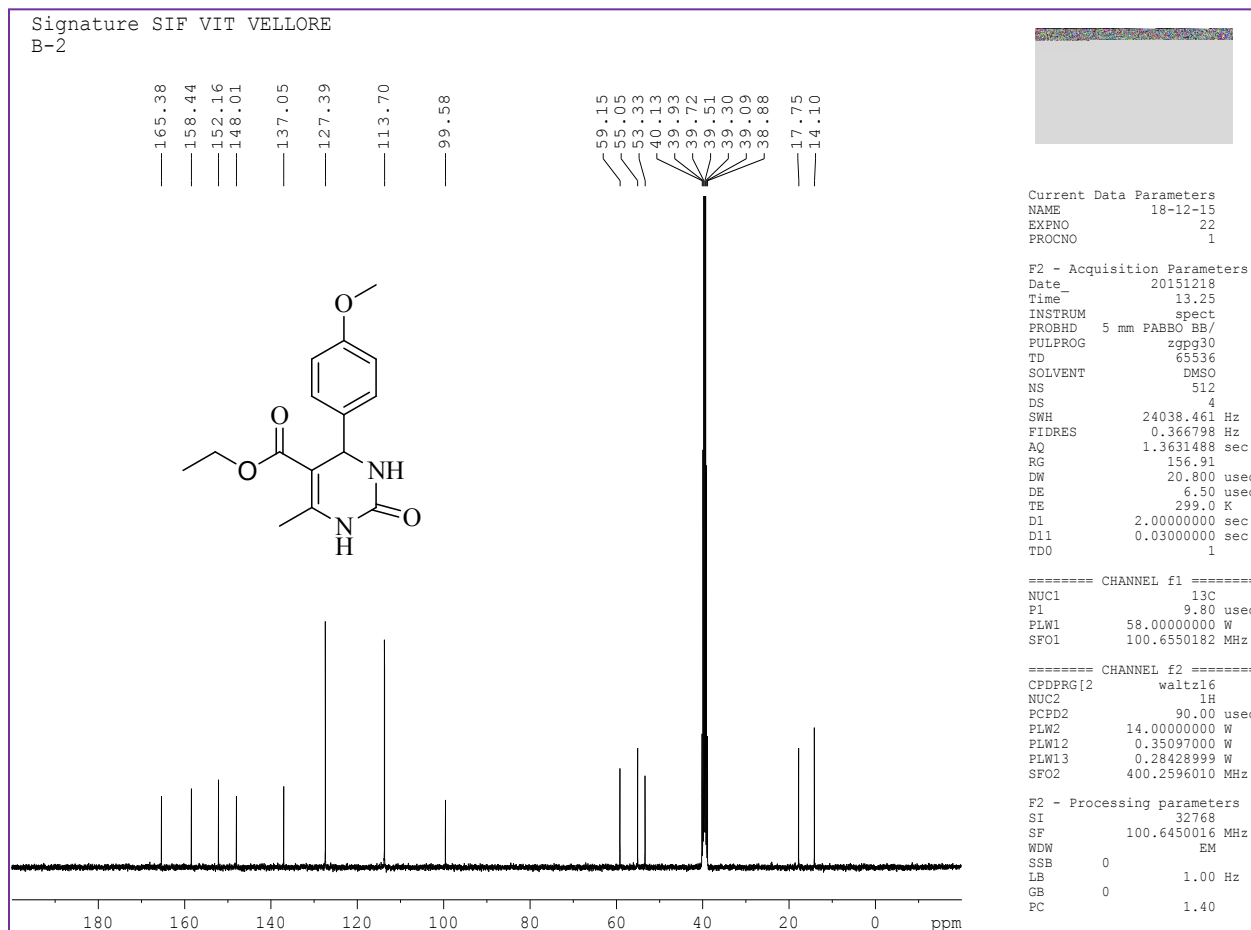
1) 5-Ethoxycarbonyl-4-phenyl-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4a).



2) 5-Ethoxycarbonyl-4-(4-methoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4b).

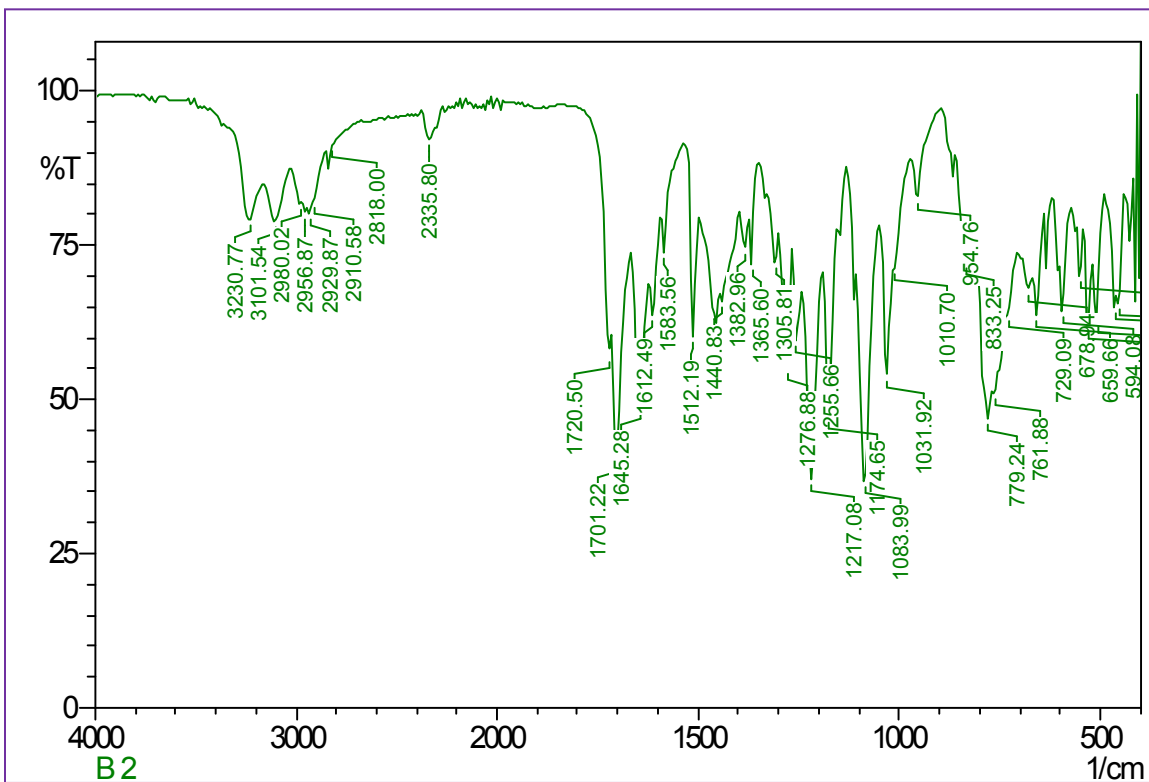


2) 5-Ethoxycarbonyl-4-(4-methoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4b).

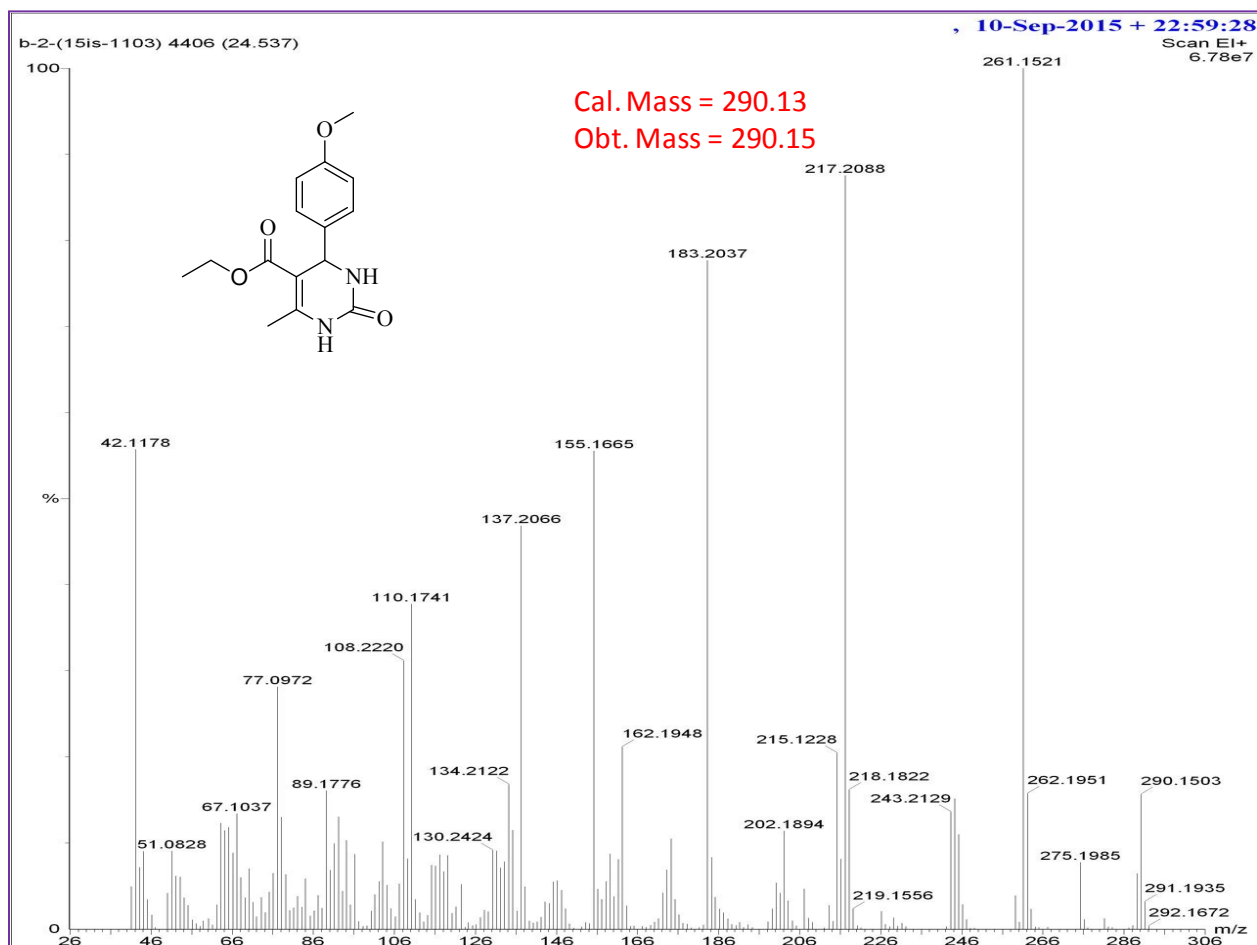




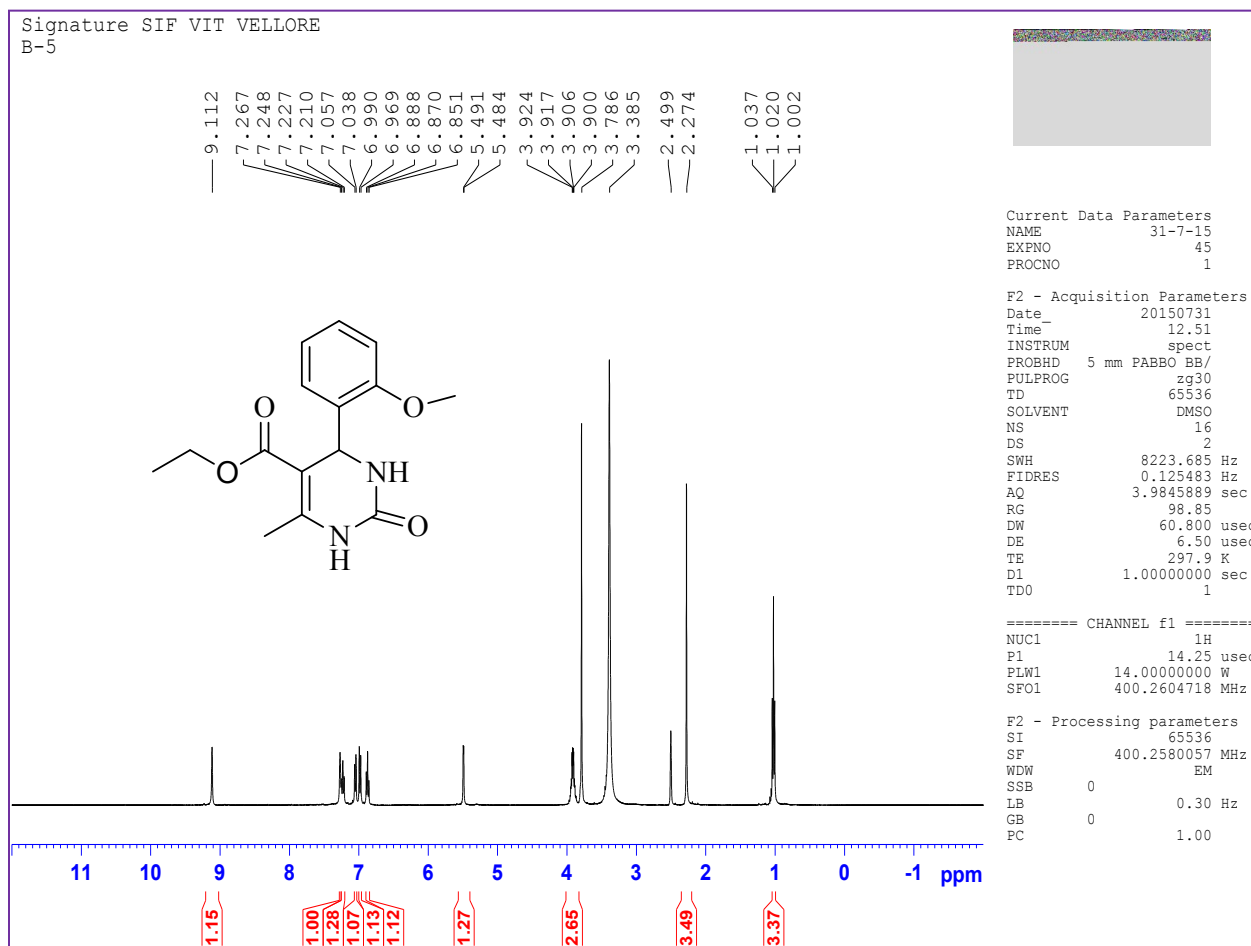
2) 5-Ethoxycarbonyl-4-(4-methoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4b).



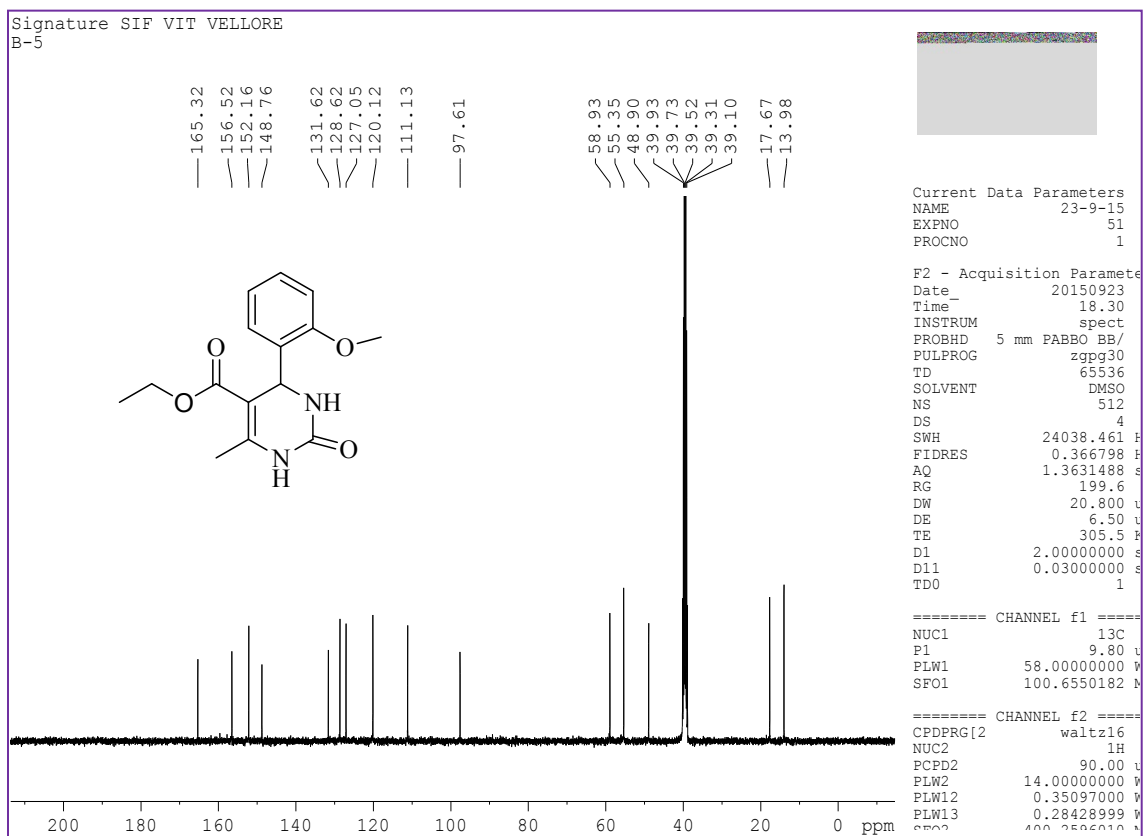
2) 5-Ethoxycarbonyl-4-(4-methoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4b).



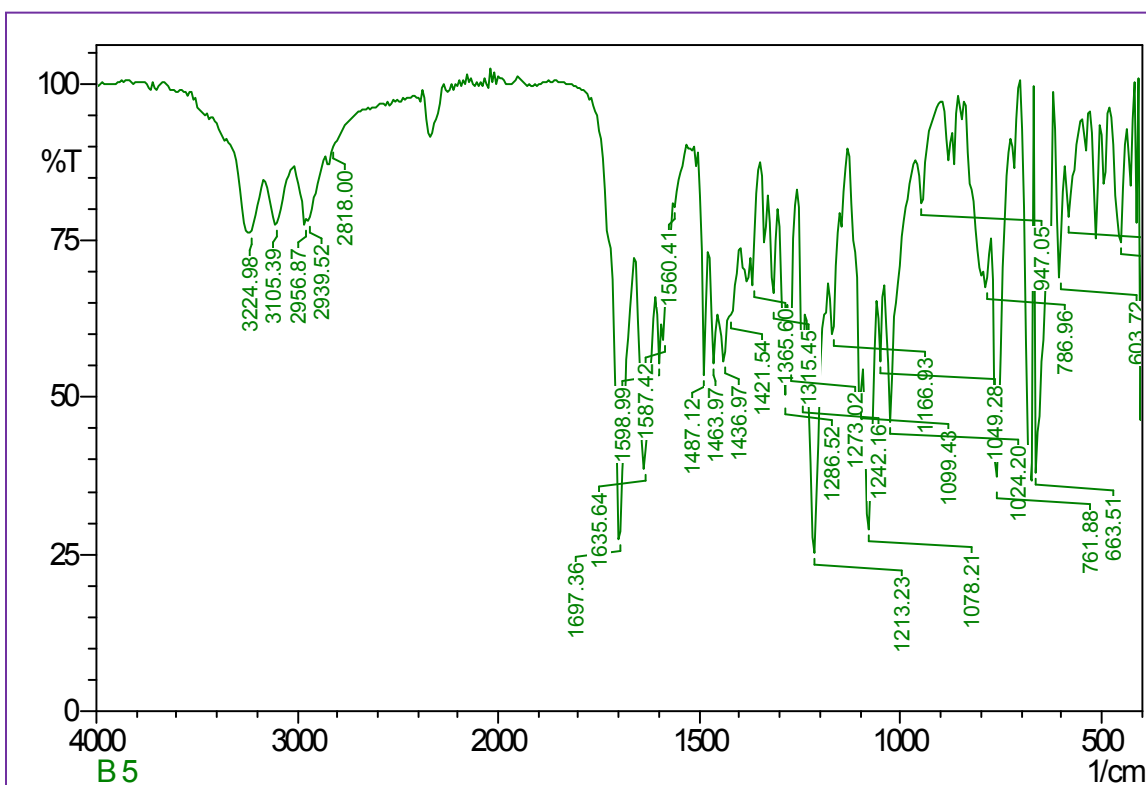
3) 5-Ethoxycarbonyl-4-(2-methoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4c).



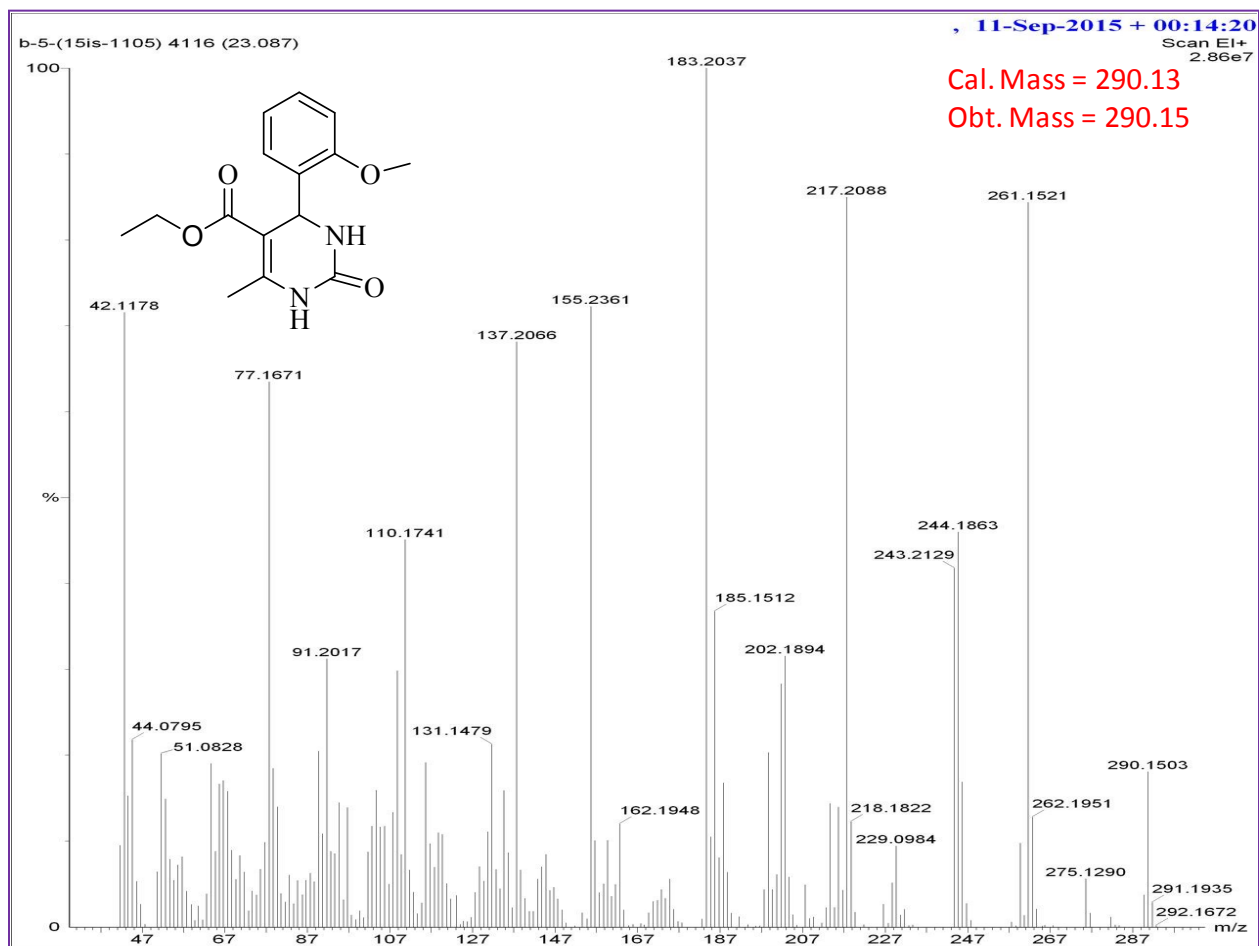
3) 5-Ethoxycarbonyl-4-(2-methoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4c).



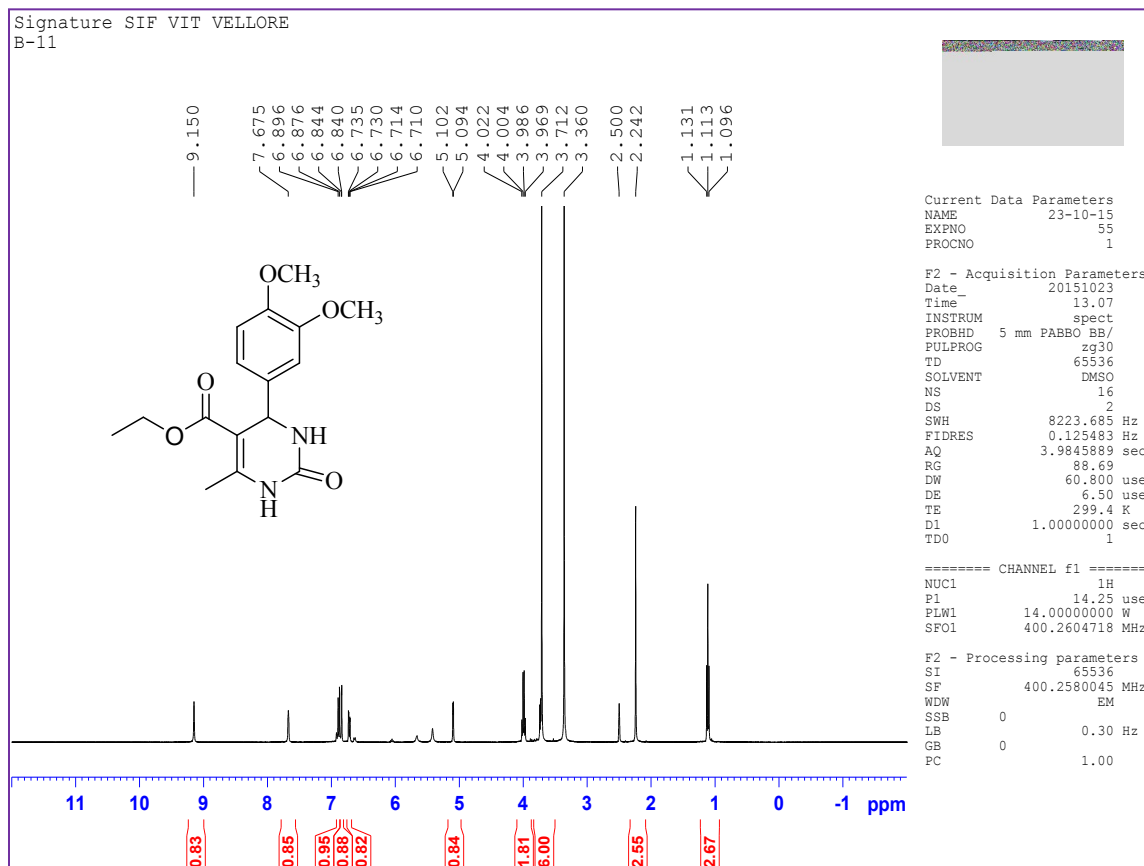
3) 5-Ethoxycarbonyl-4-(2-methoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4c).



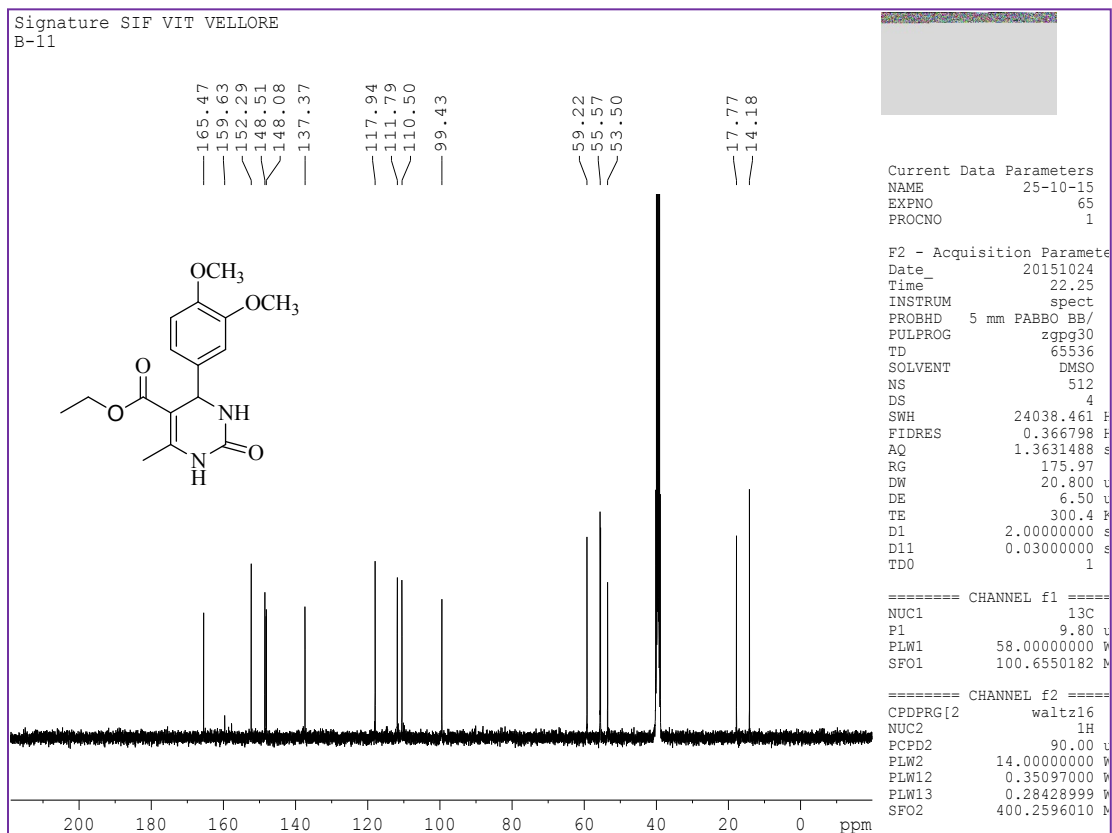
3) 5-Ethoxycarbonyl-4-(2-methoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4c).



**4) 5-Ethoxycarbonyl-4-(3,4-dimethoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4d).**

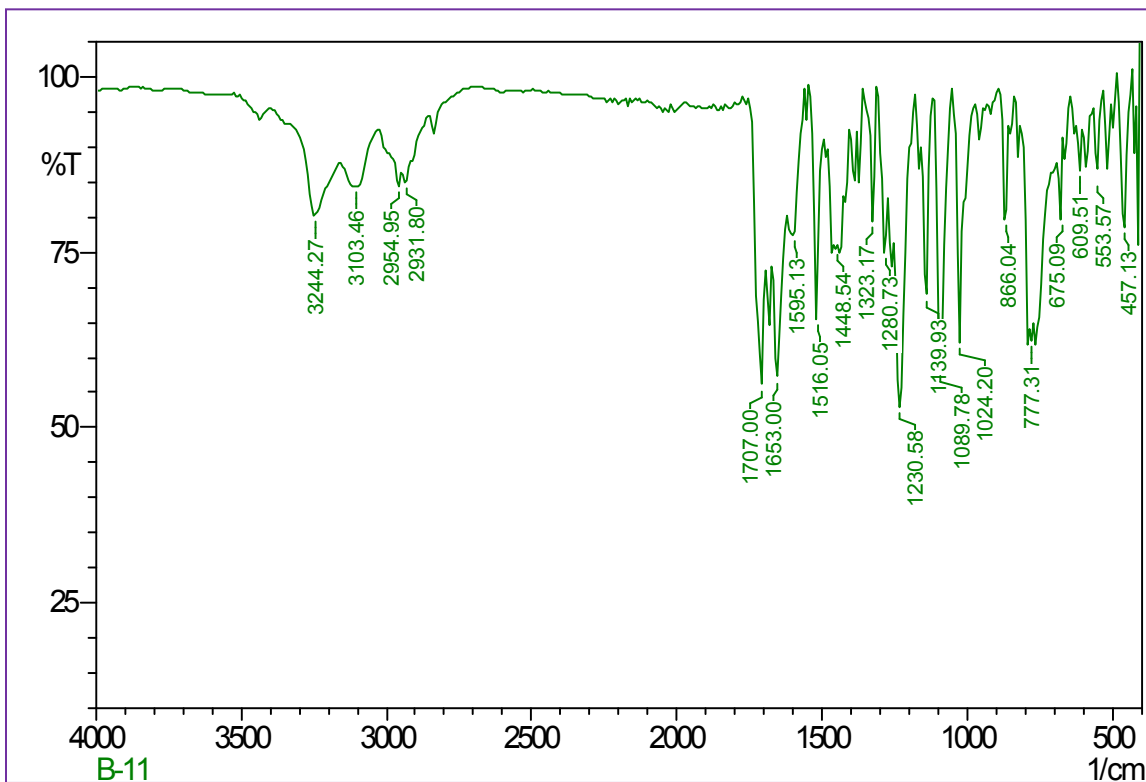


4) 5-Ethoxycarbonyl-4-(3,4-dimethoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4d).

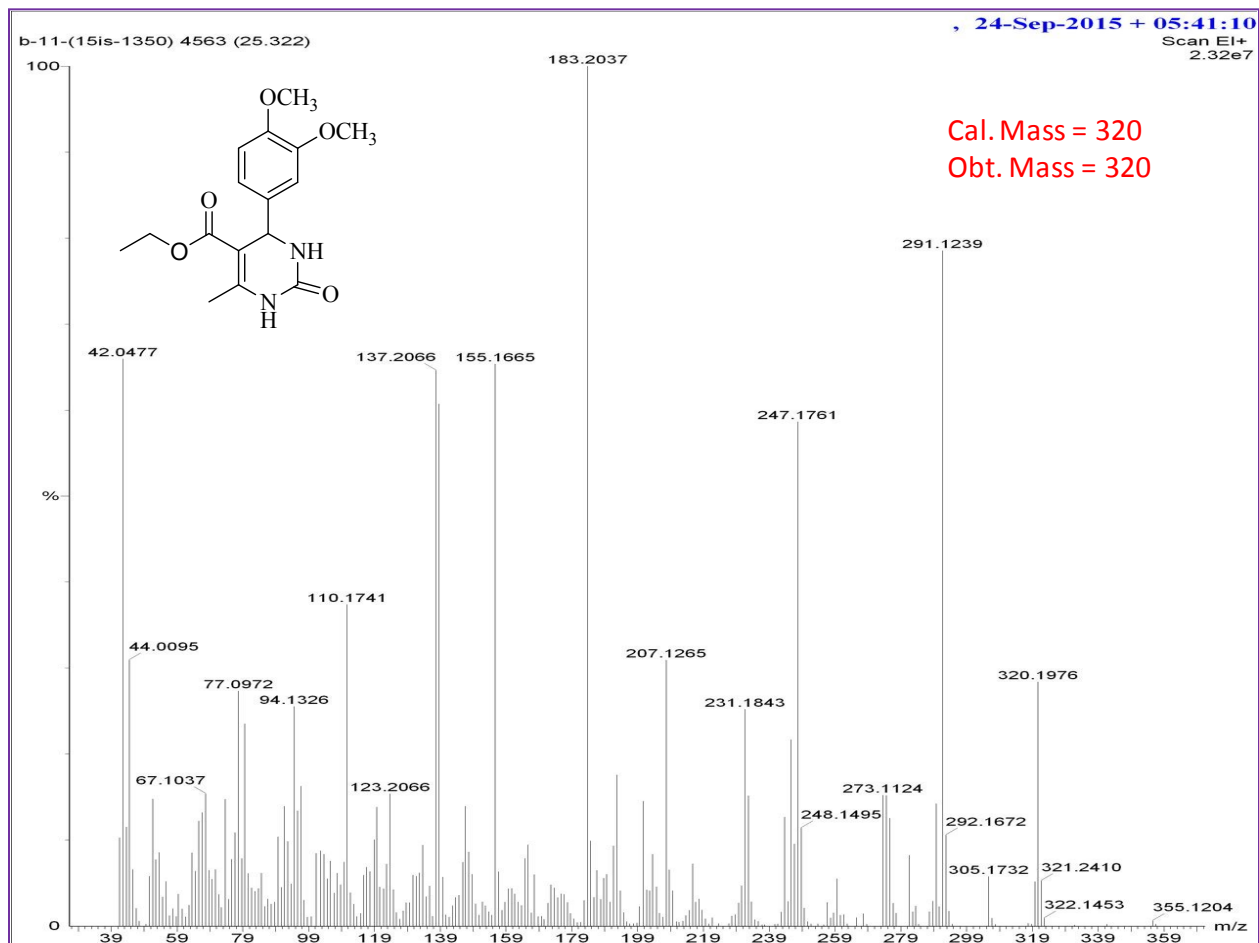




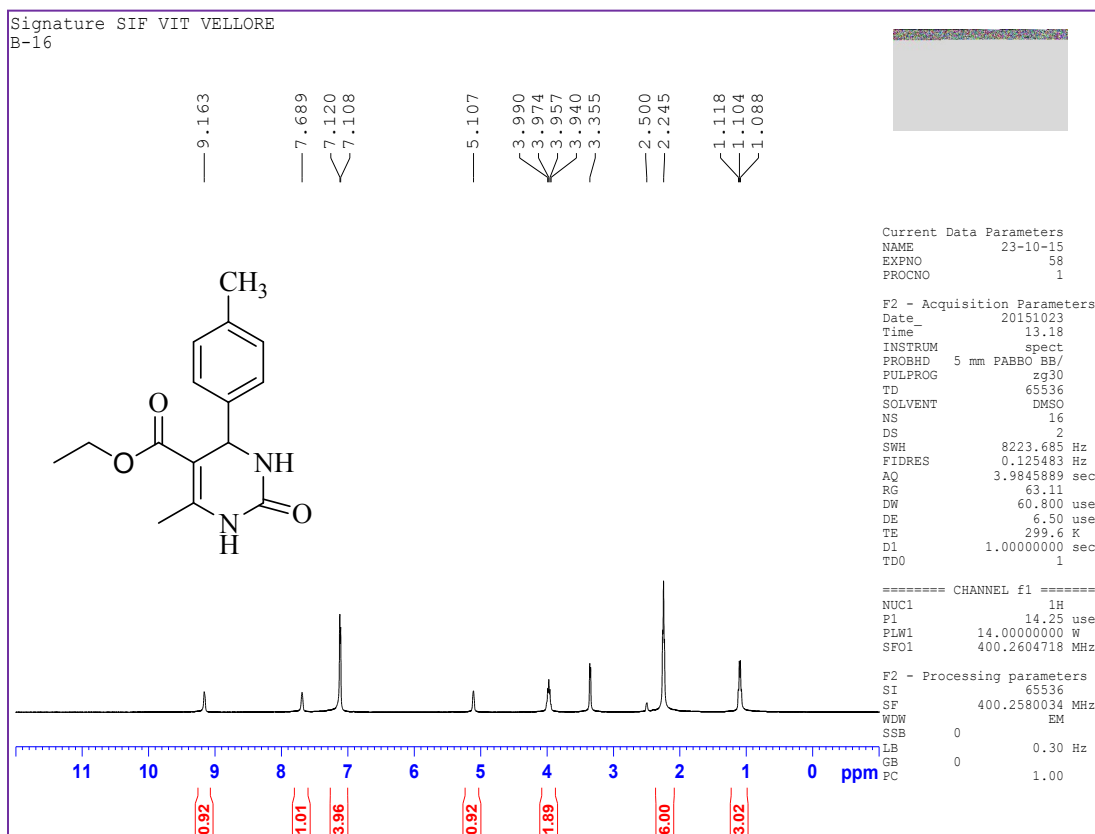
4) 5-Ethoxycarbonyl-4-(3,4-dimethoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4d).



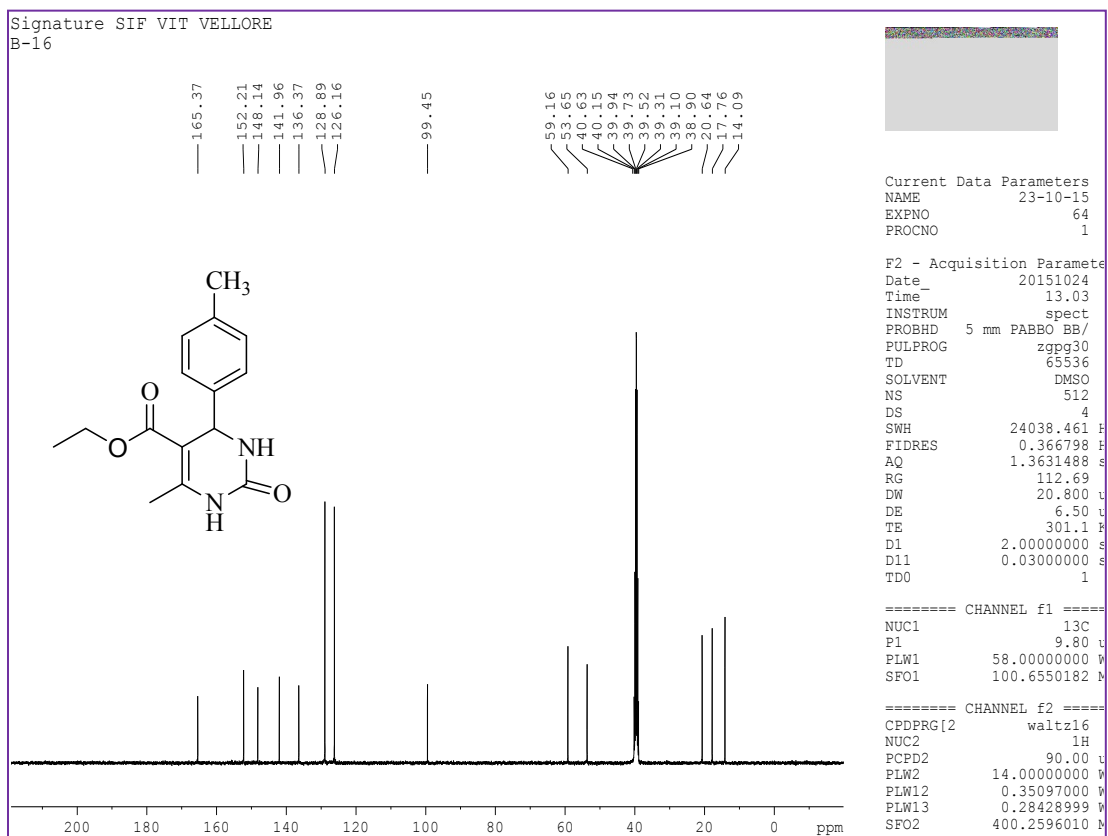
4) 5-Ethoxycarbonyl-4-(3,4-dimethoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4d).



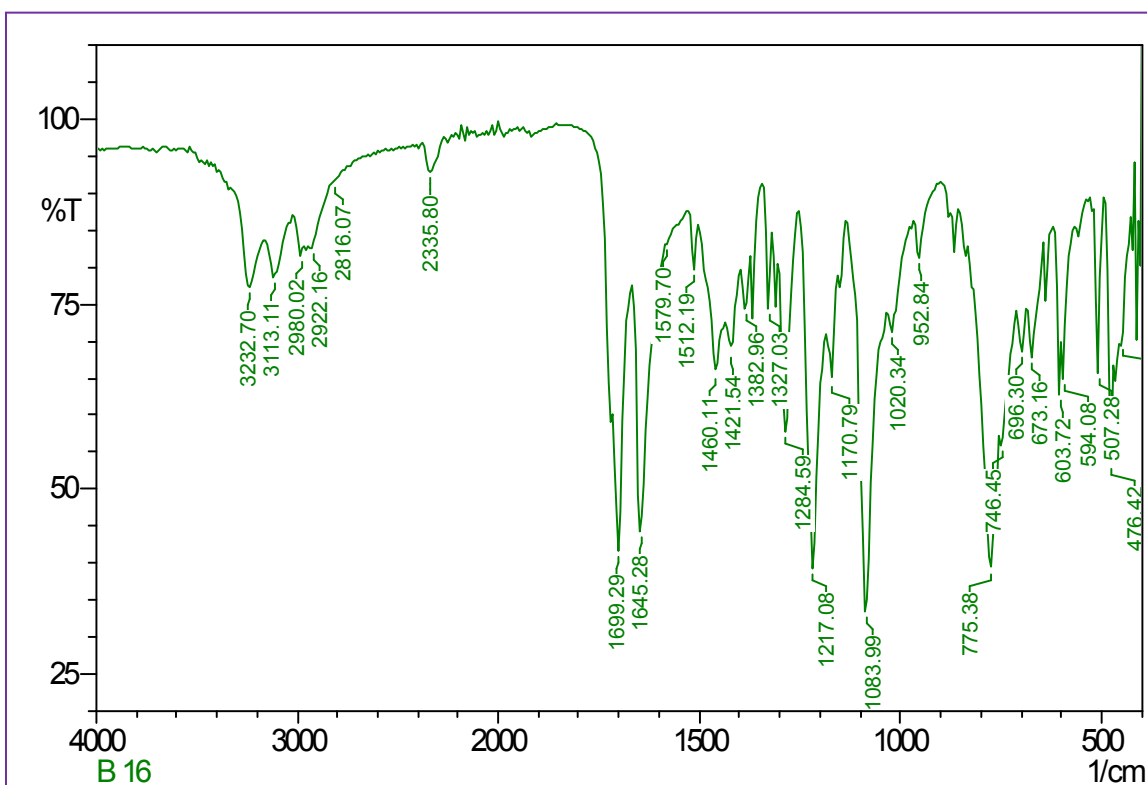
5) 5-Ethoxycarbonyl-4(4-methylphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4e).



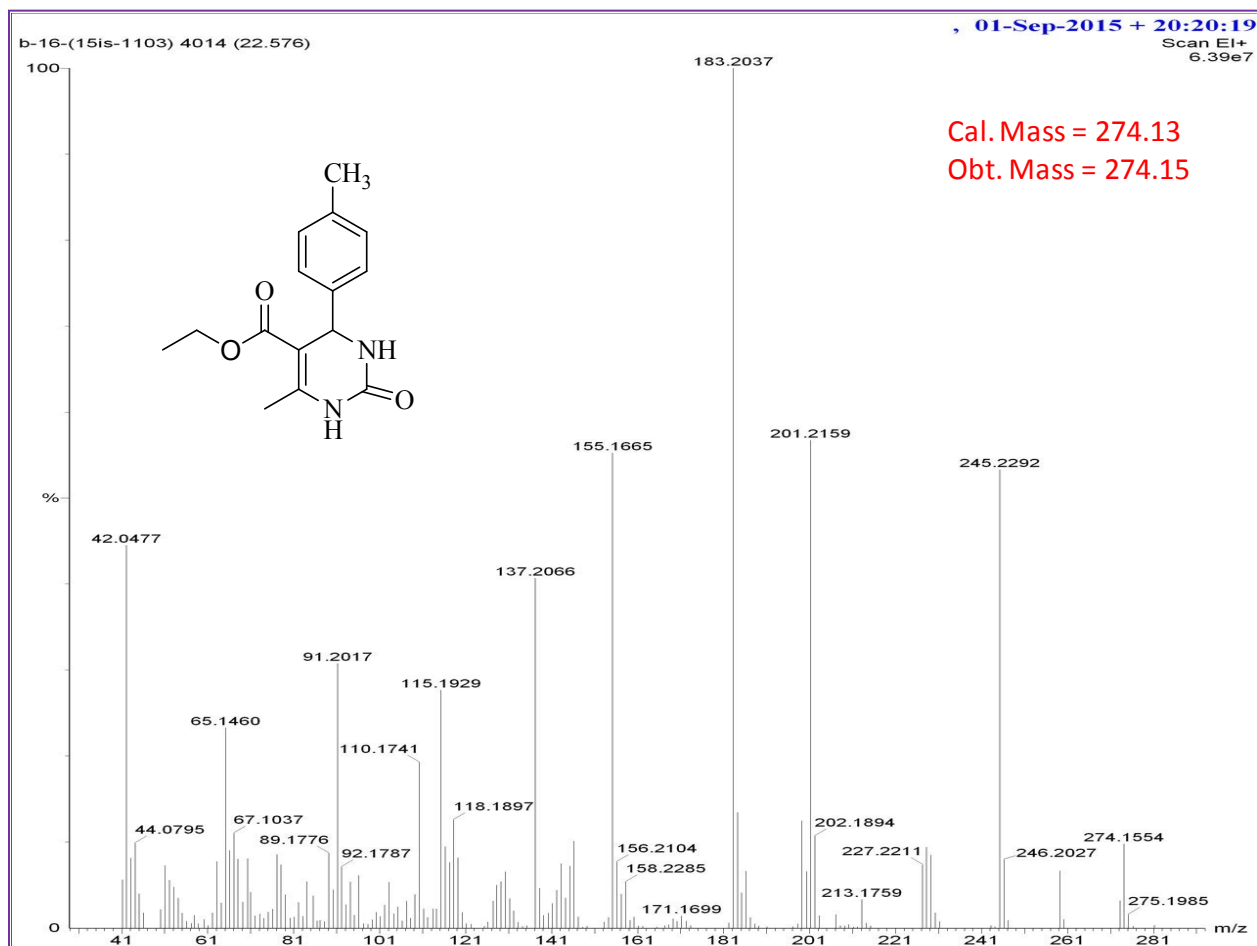
5) 5-Ethoxycarbonyl-4(4-methylphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4e).



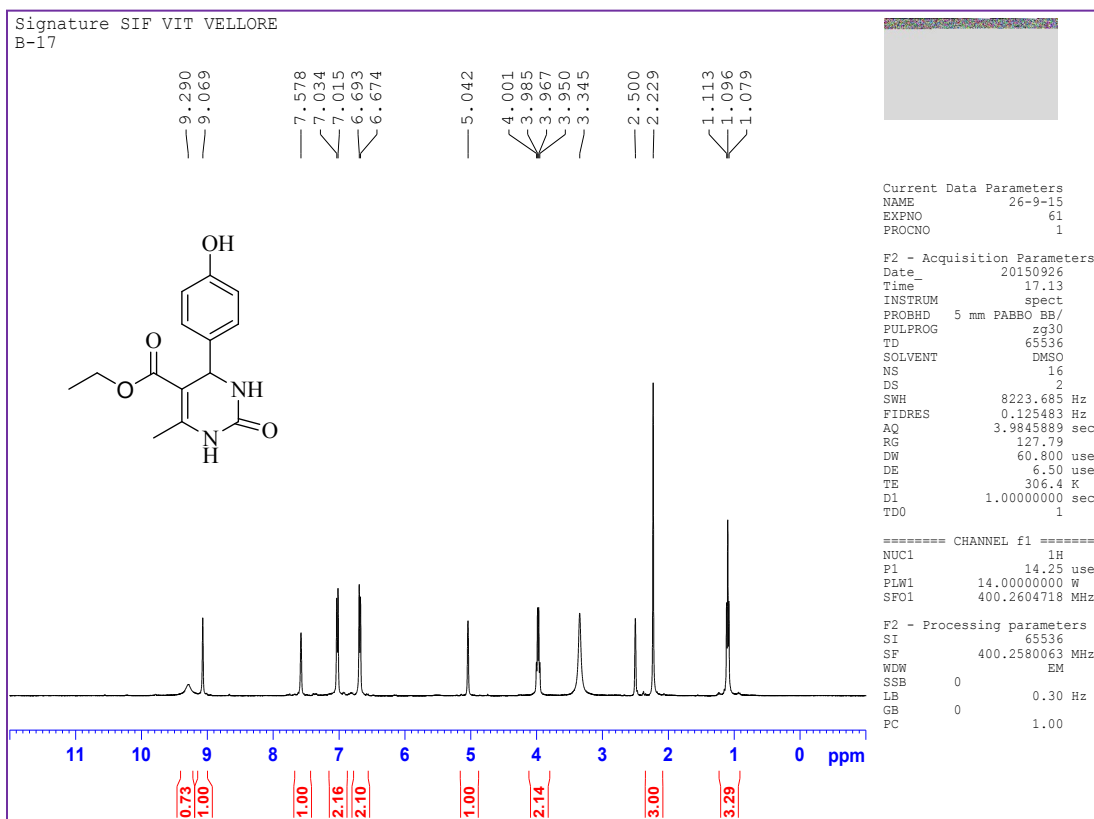
5) 5-Ethoxycarbonyl-4(4-methylphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4e).



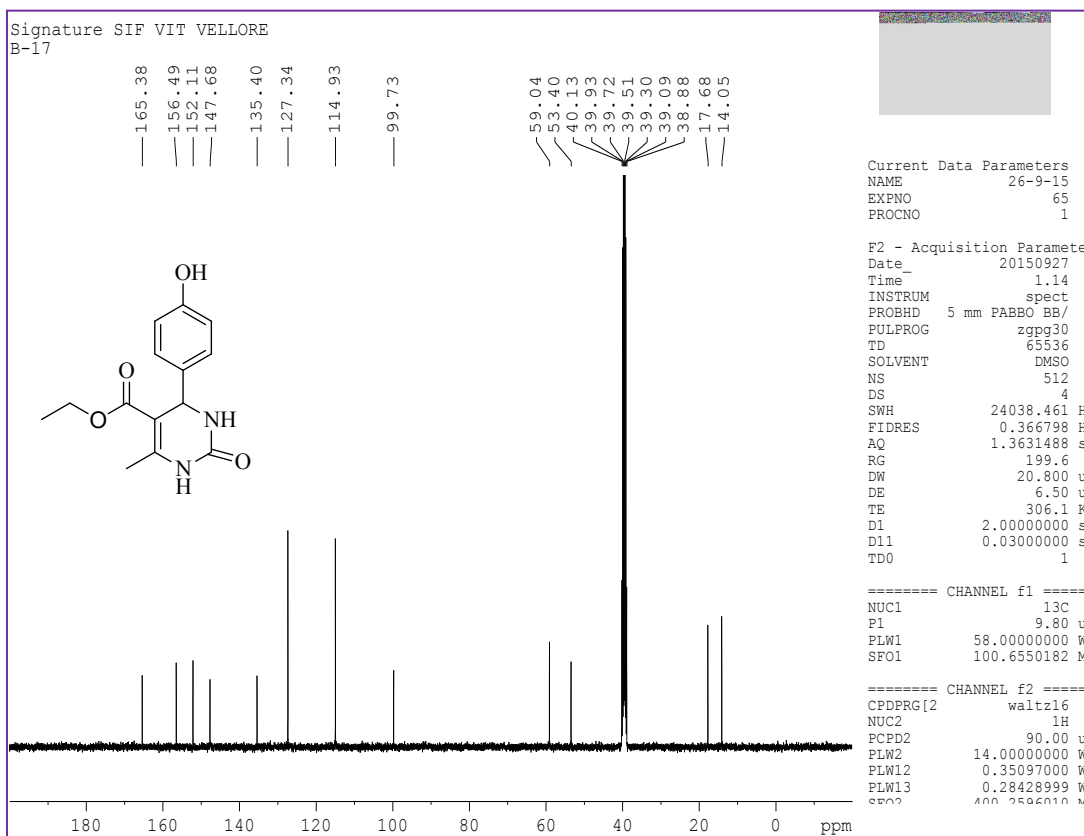
5) 5-Ethoxycarbonyl-4(4-methylphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4e).



6) 5-Ethoxycarbonyl-4-(4-hydroxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4f).

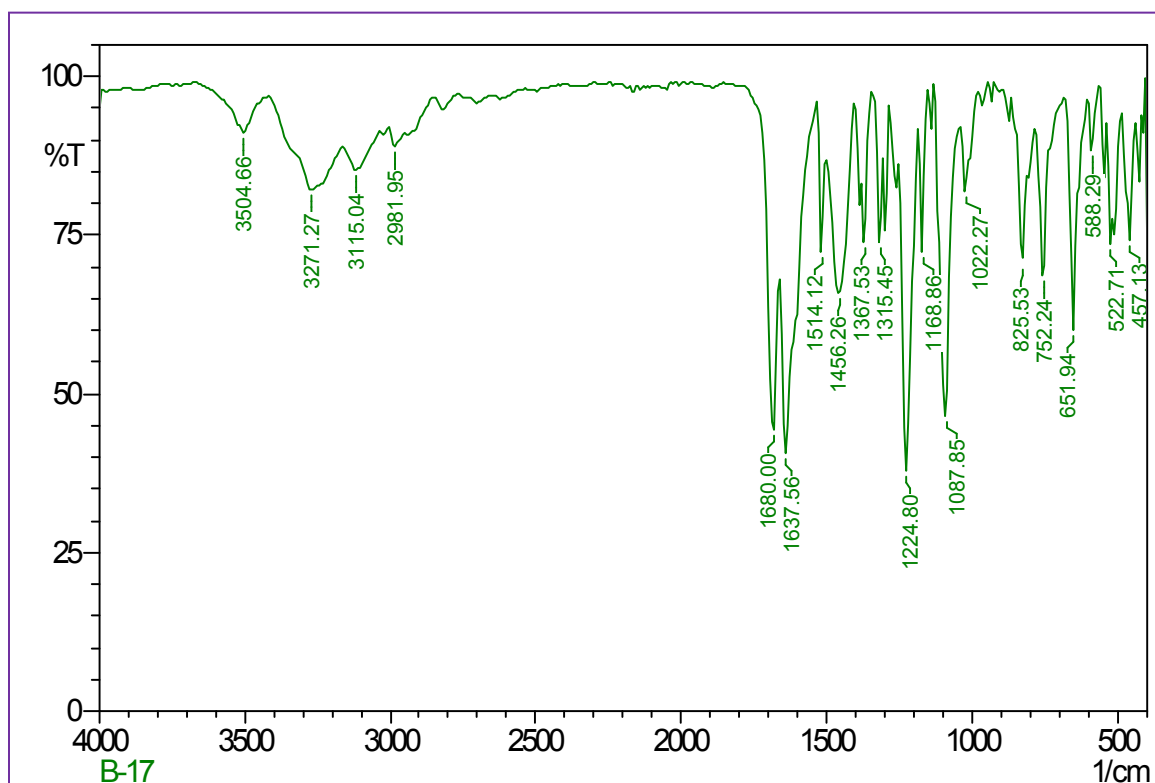


6) 5-Ethoxycarbonyl-4-(4-hydroxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4f).

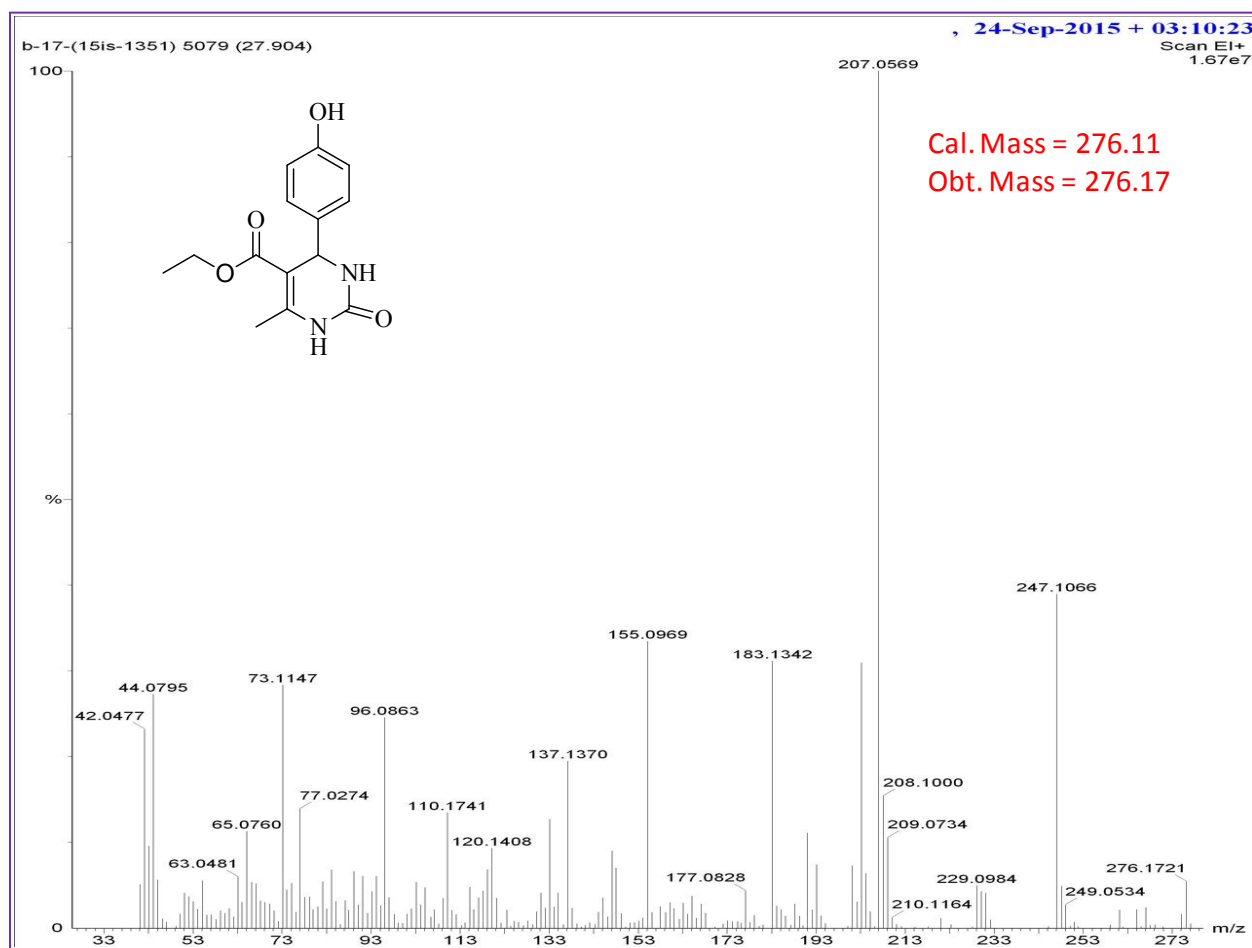




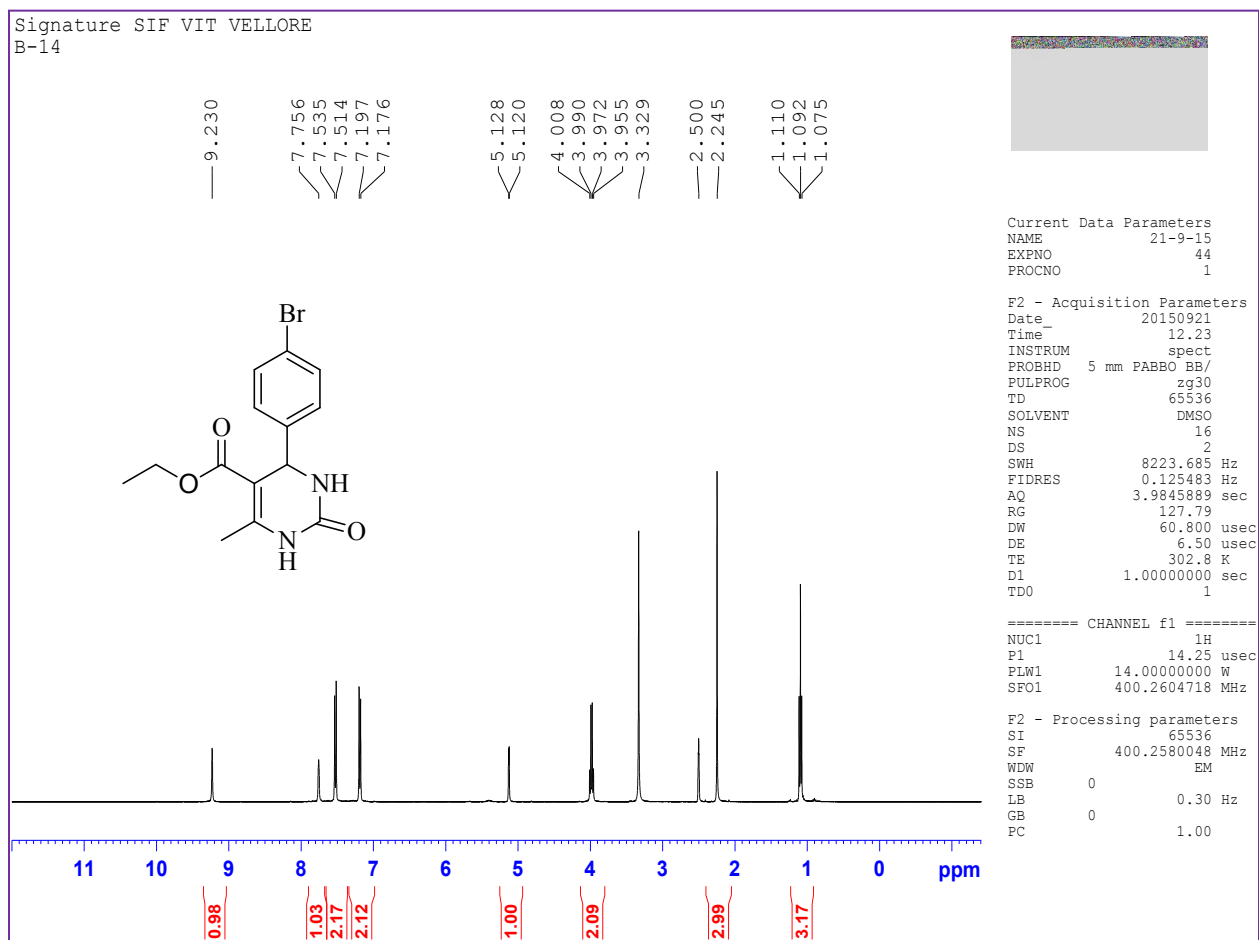
6) 5-Ethoxycarbonyl-4-(4-hydroxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4f).



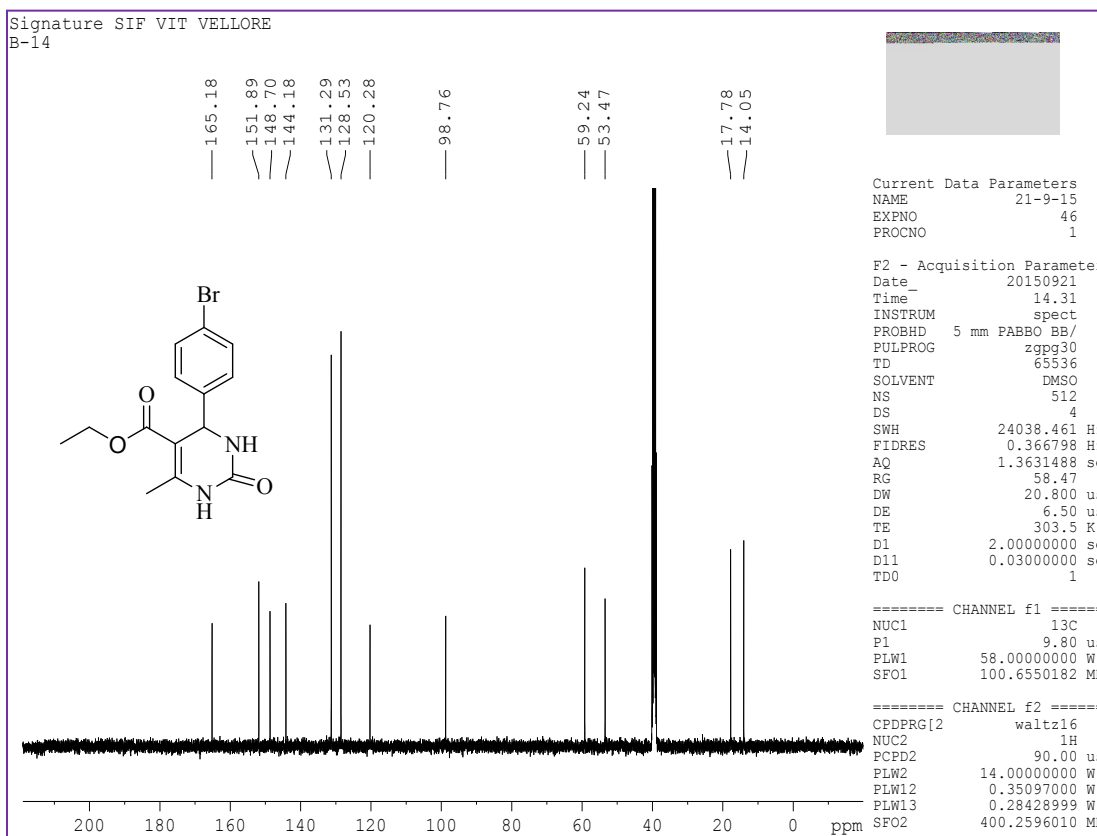
6) 5-Ethoxycarbonyl-4-(4-hydroxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4f).



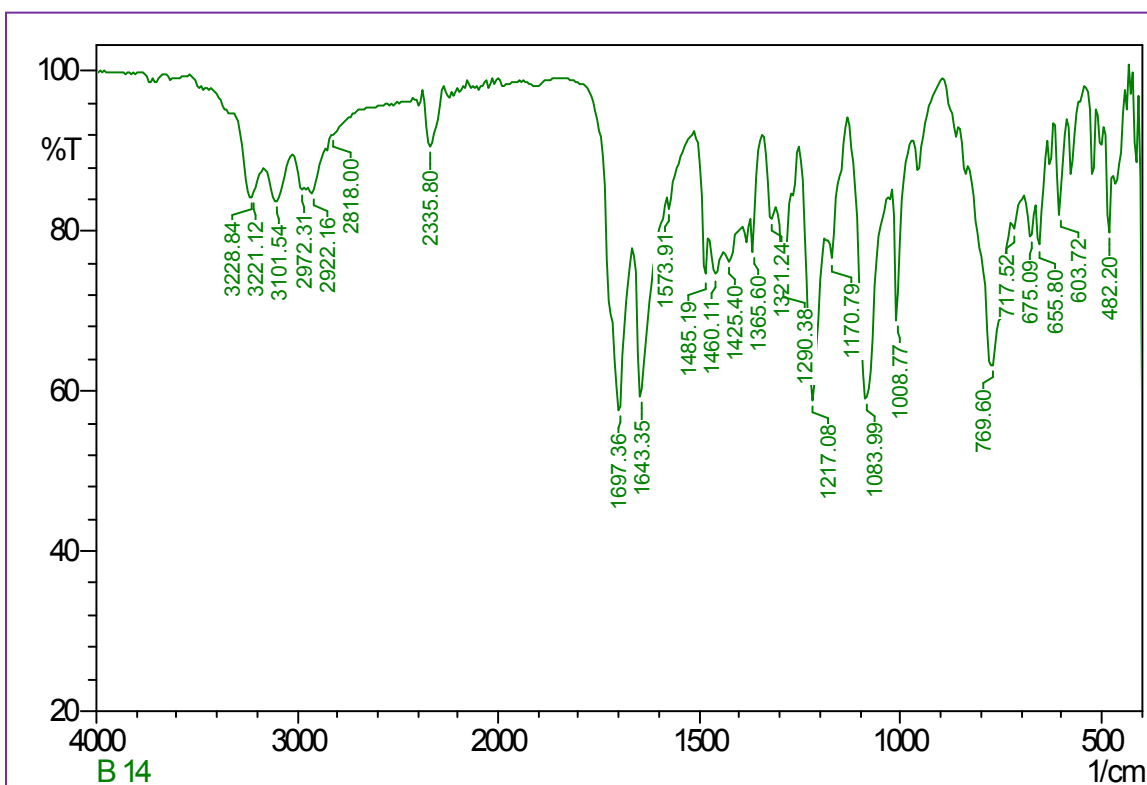
**7) 5-Ethoxycarbonyl-4-(4-bromophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4g).**



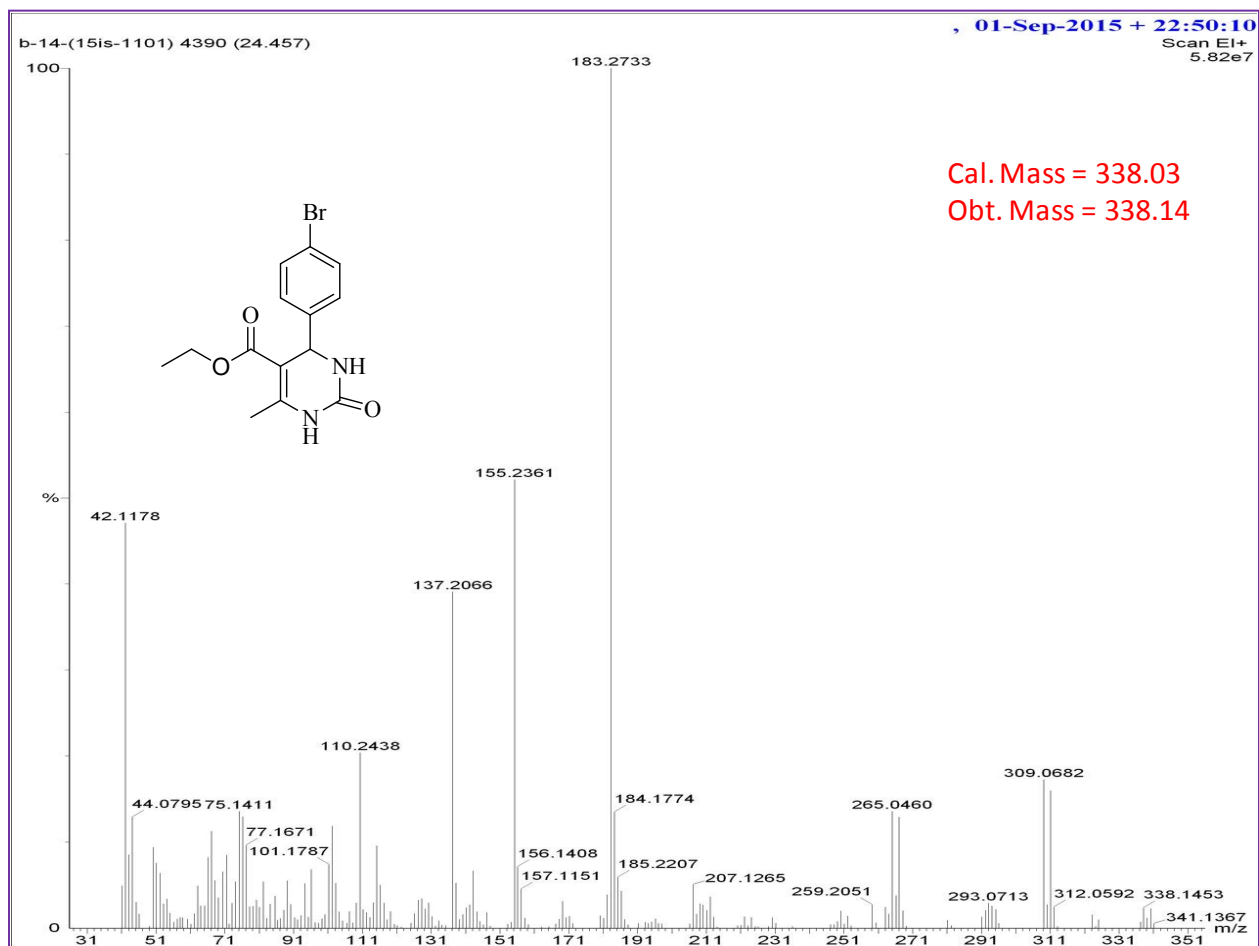
7) 5-Ethoxycarbonyl-4-(4-bromophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4g).



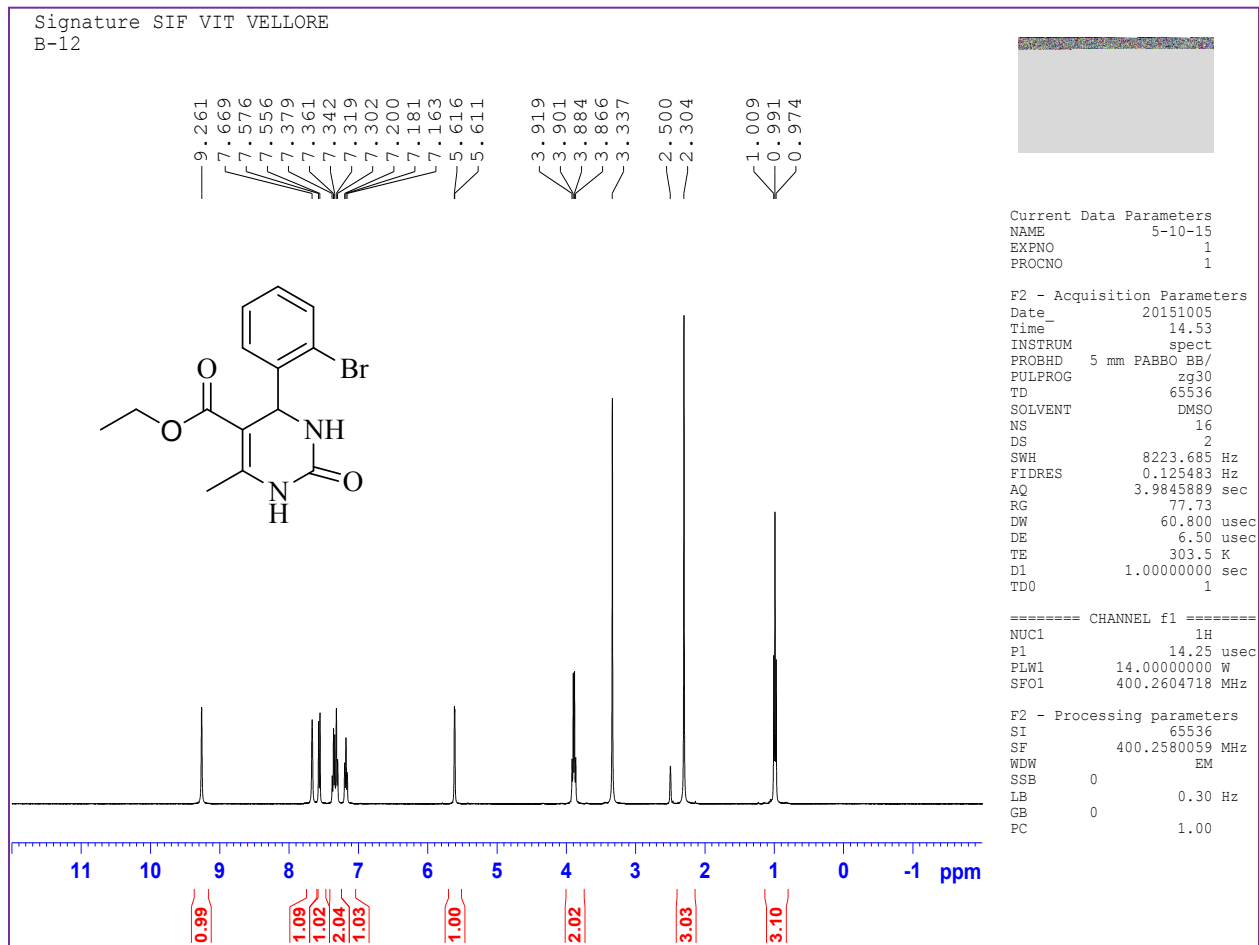
7) 5-Ethoxycarbonyl-4-(4-bromophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4g).



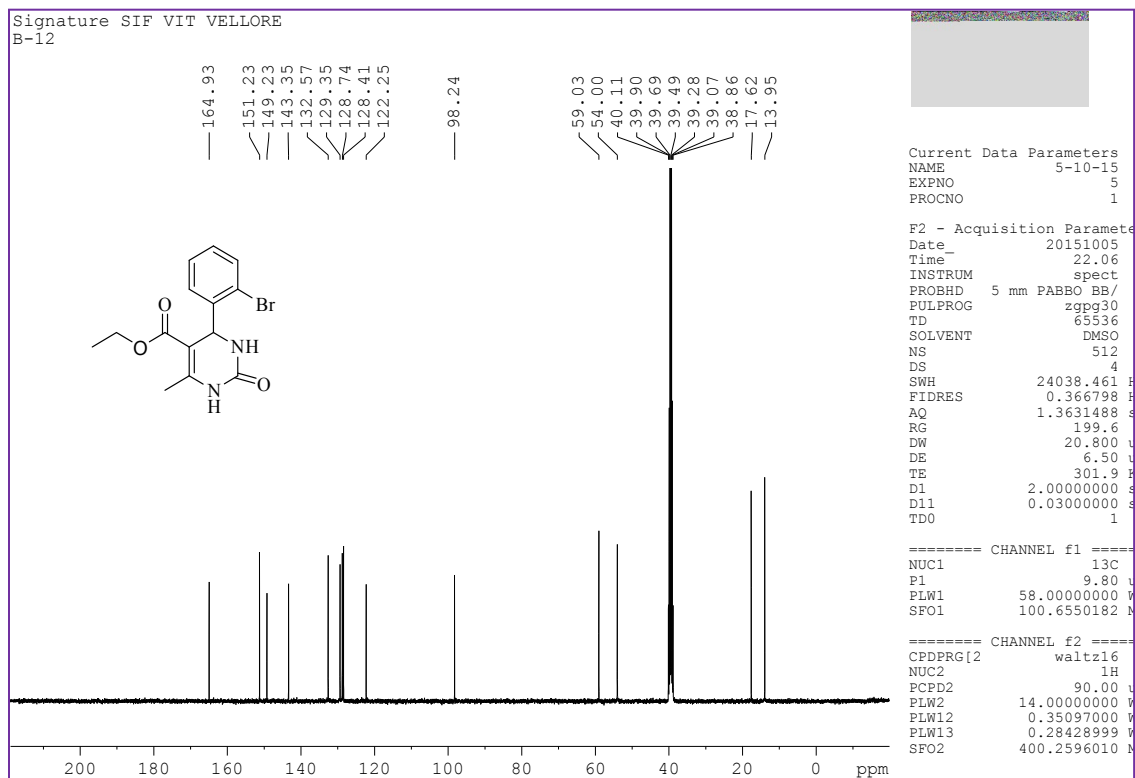
7) 5-Ethoxycarbonyl-4-(4-bromophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4g).



**8) 5-Ethoxycarbonyl-4-(2-bromophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4h).**

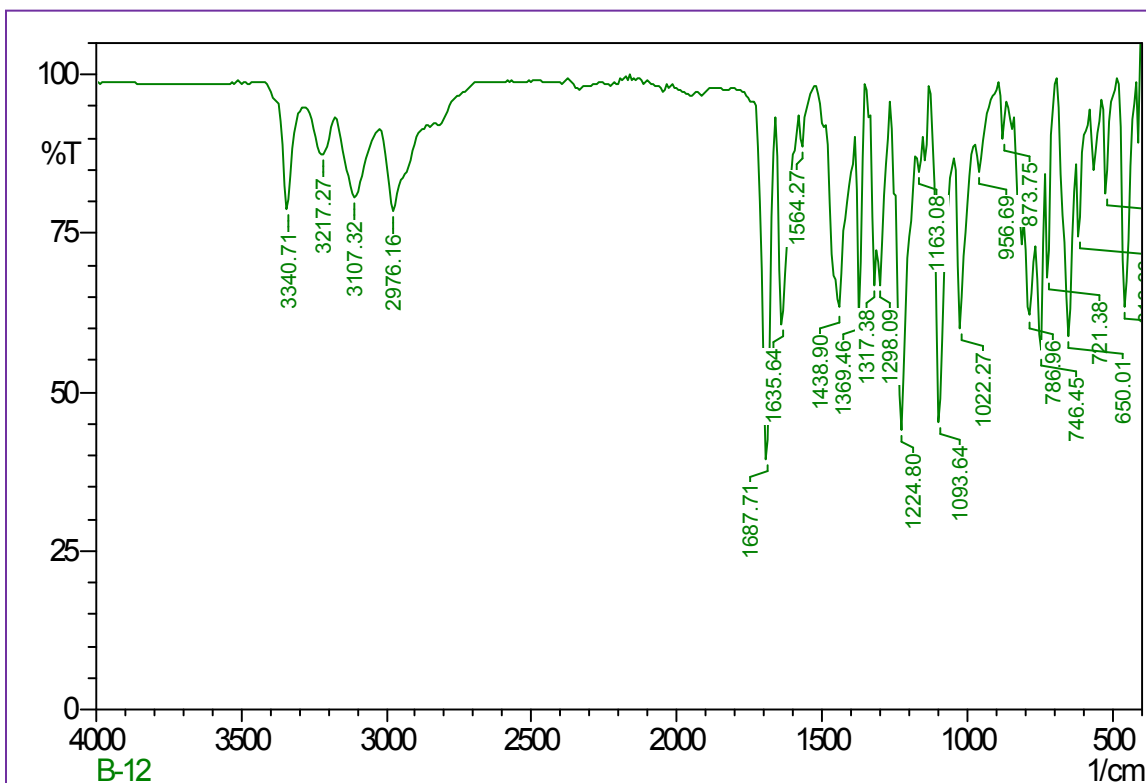


8) 5-Ethoxycarbonyl-4-(2-bromophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4h).

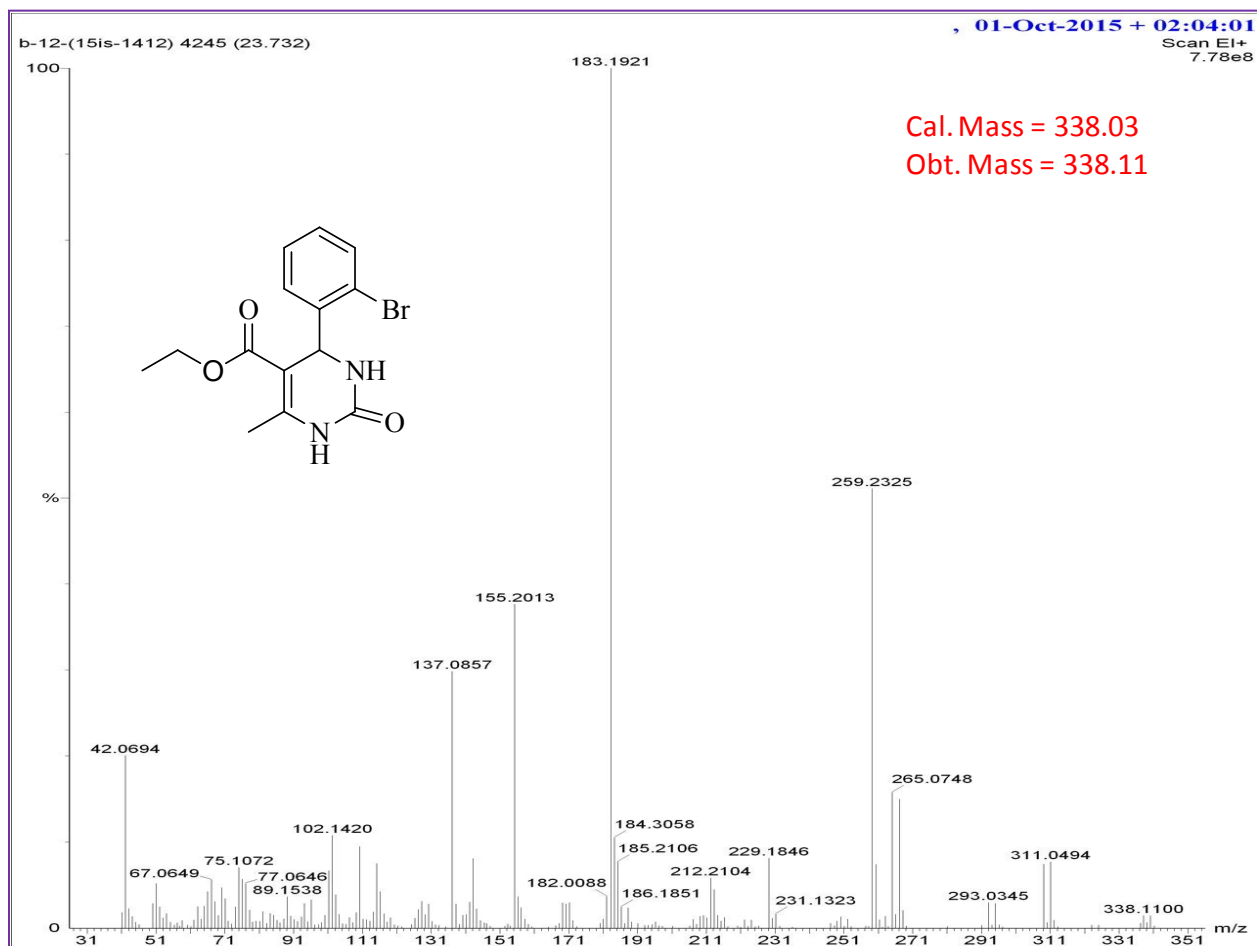




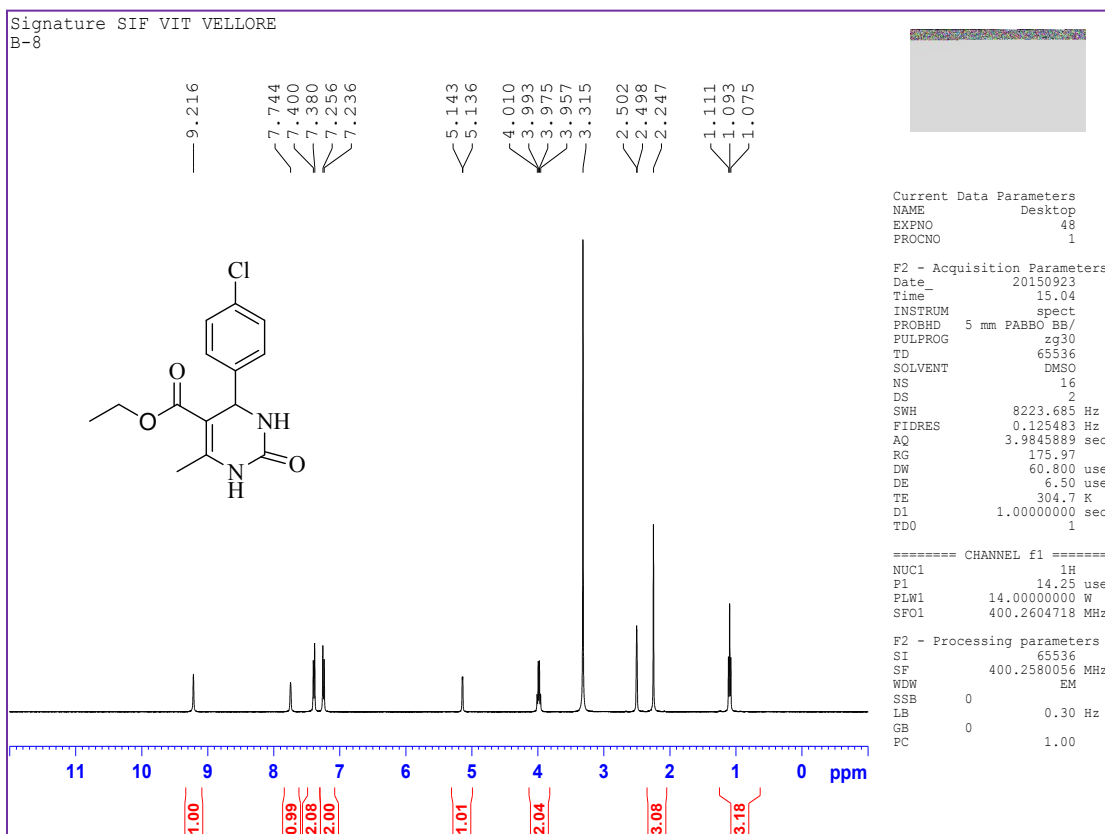
8) 5-Ethoxycarbonyl-4-(2-bromophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4h).



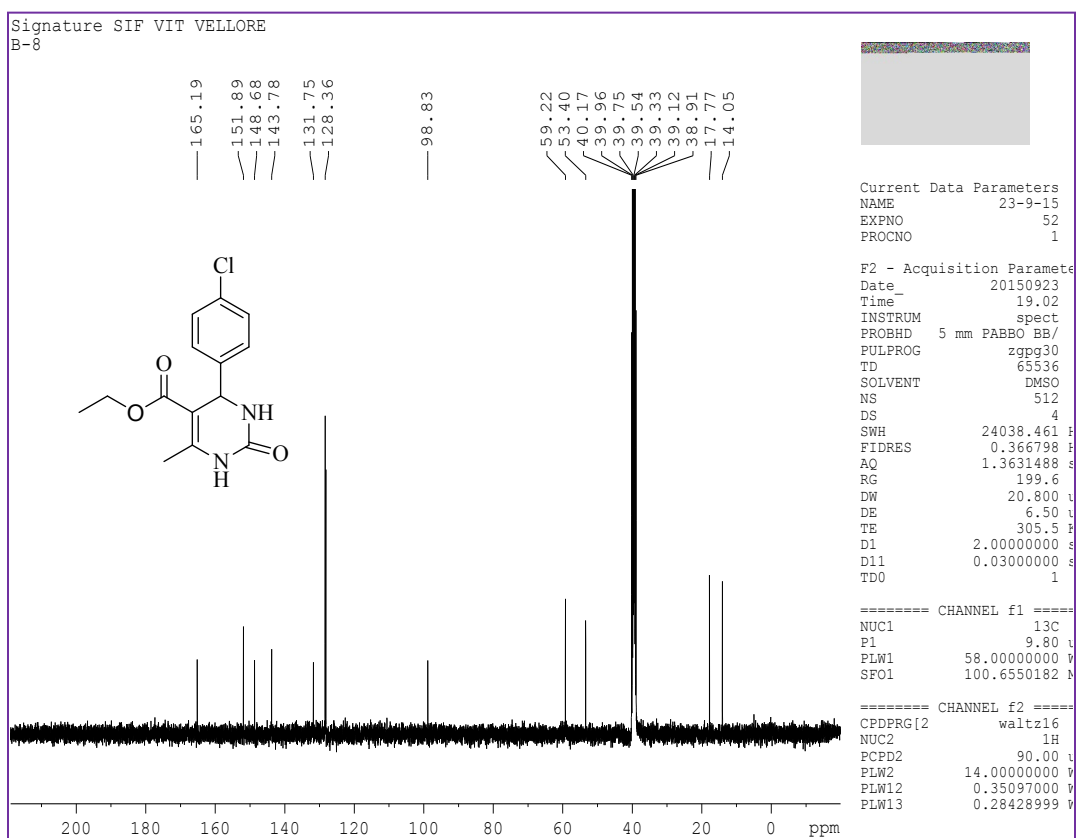
8) 5-Ethoxycarbonyl-4-(2-bromophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4h).



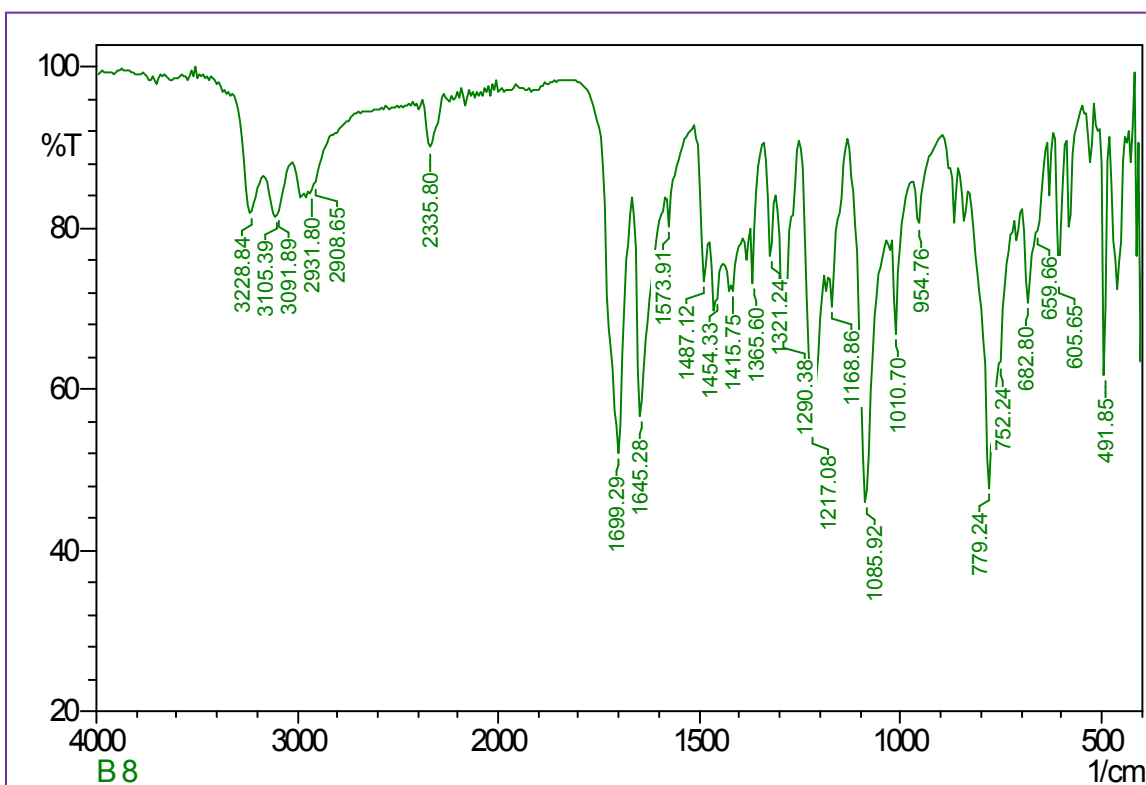
9) 5-Ethoxycarbonyl-4-(4-chlorophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4i).



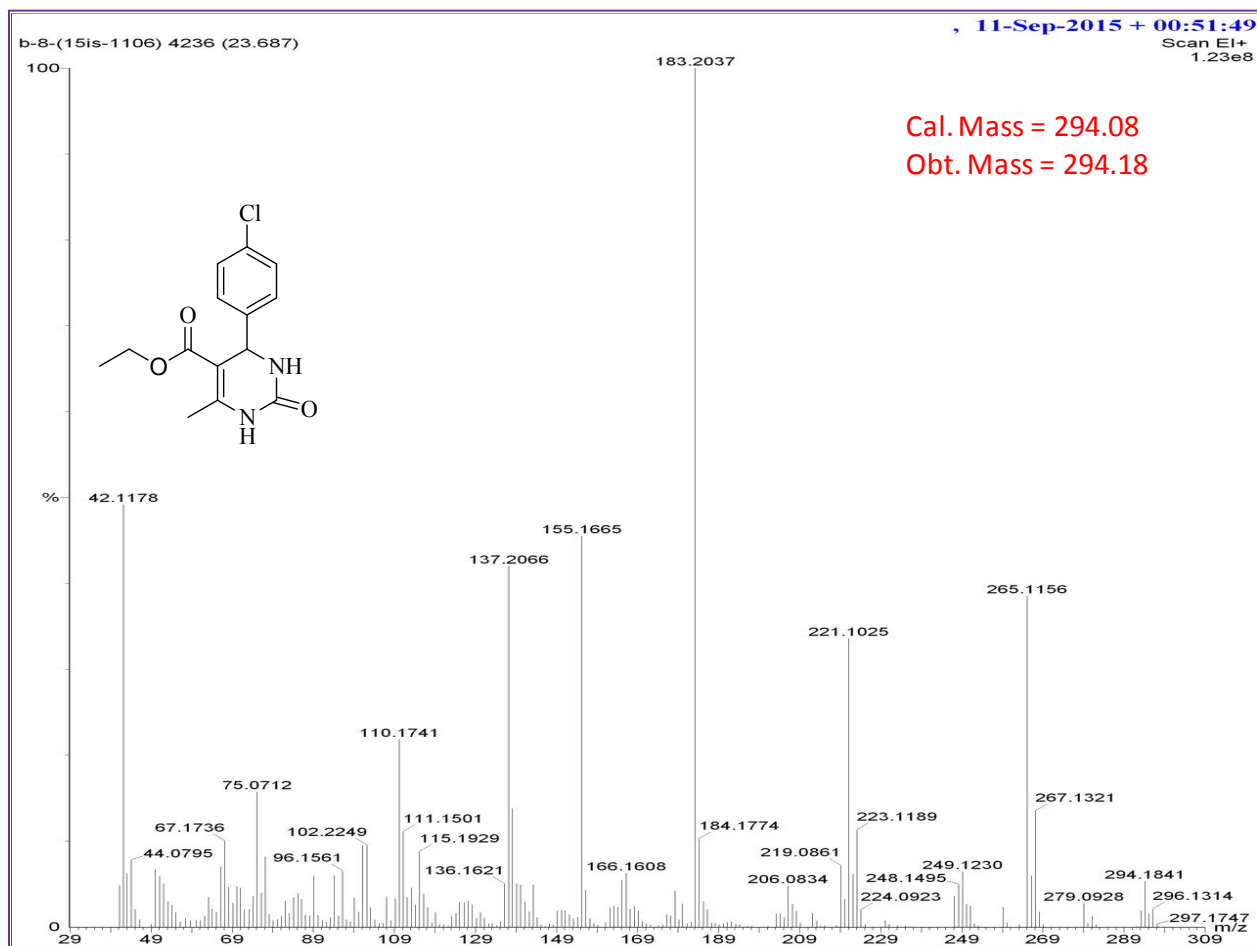
9) 5-Ethoxycarbonyl-4-(4-chlorophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4i).



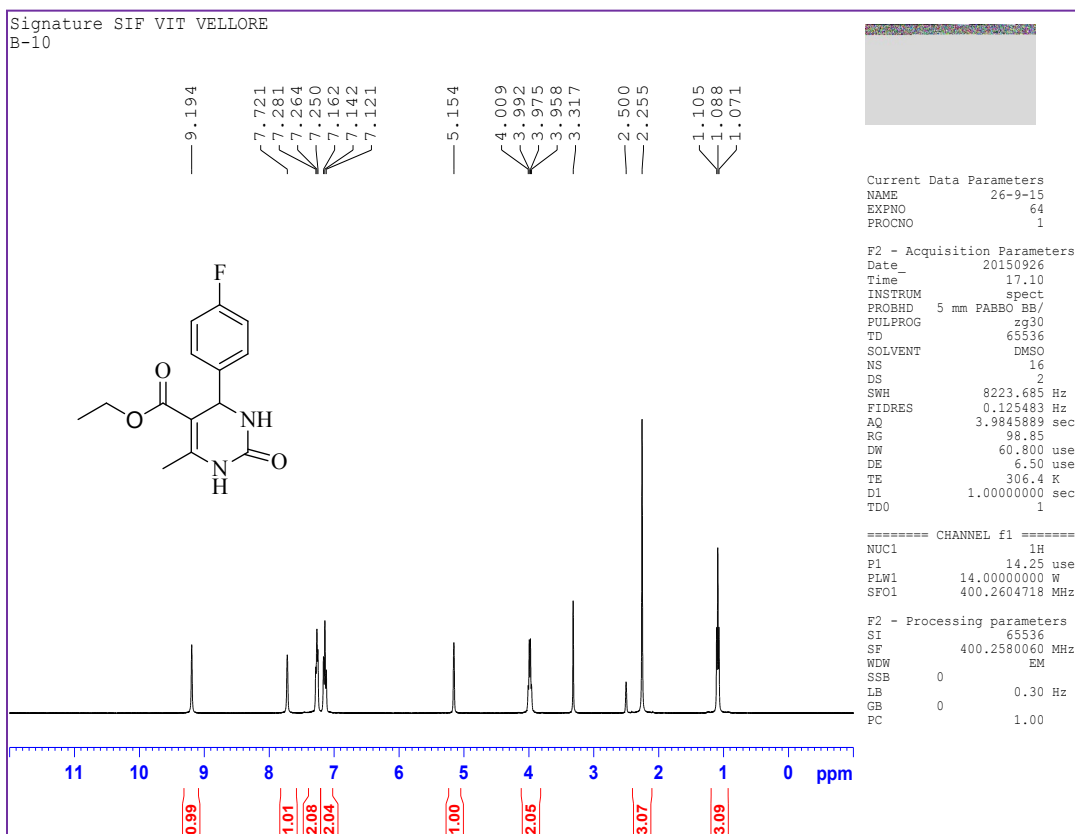
9) 5-Ethoxycarbonyl-4-(4-chlorophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4i).



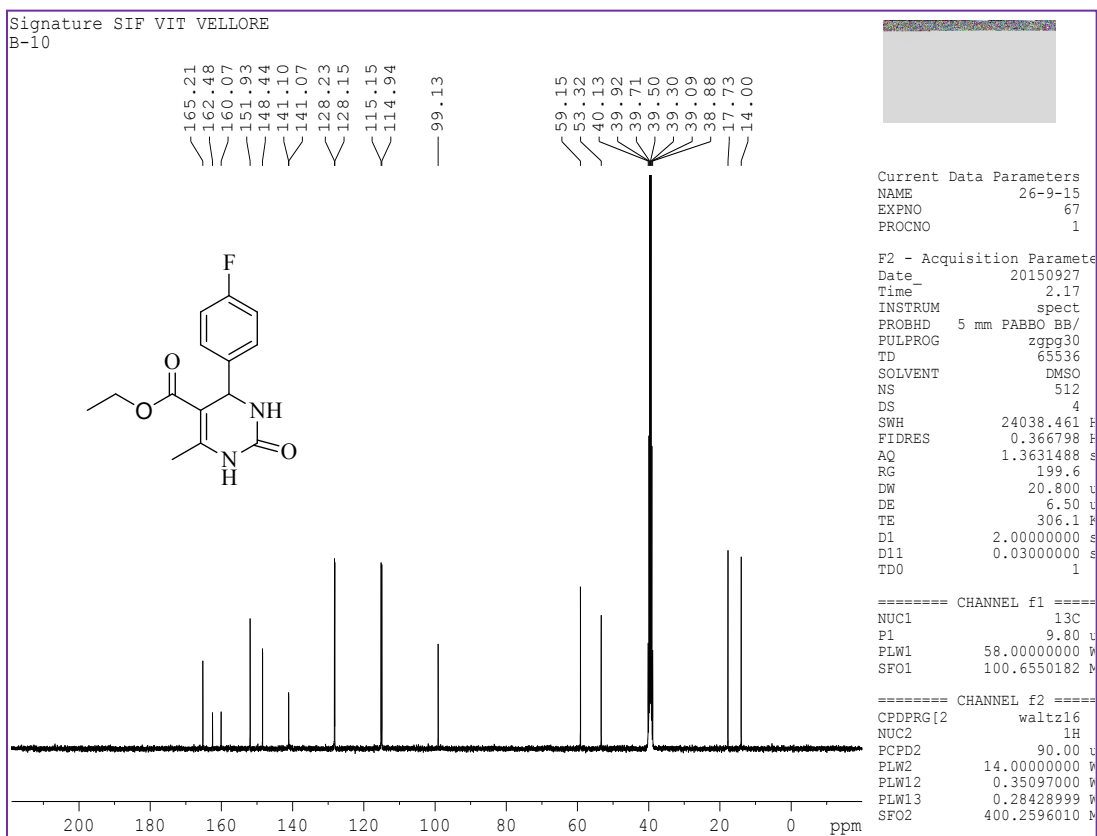
9) 5-Ethoxycarbonyl-4-(4-chlorophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4i).



10) 5-Ethoxycarbonyl-4-(4-fluorophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4j).

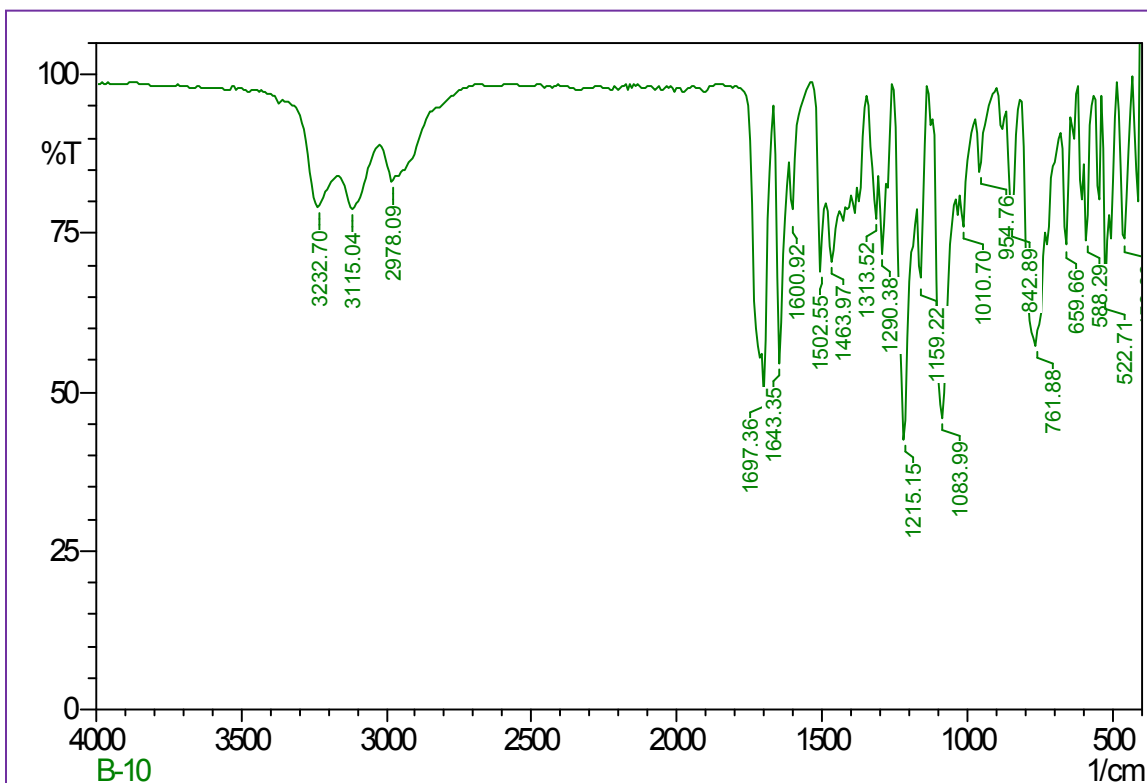


10) 5-Ethoxycarbonyl-4-(4-fluorophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4j).

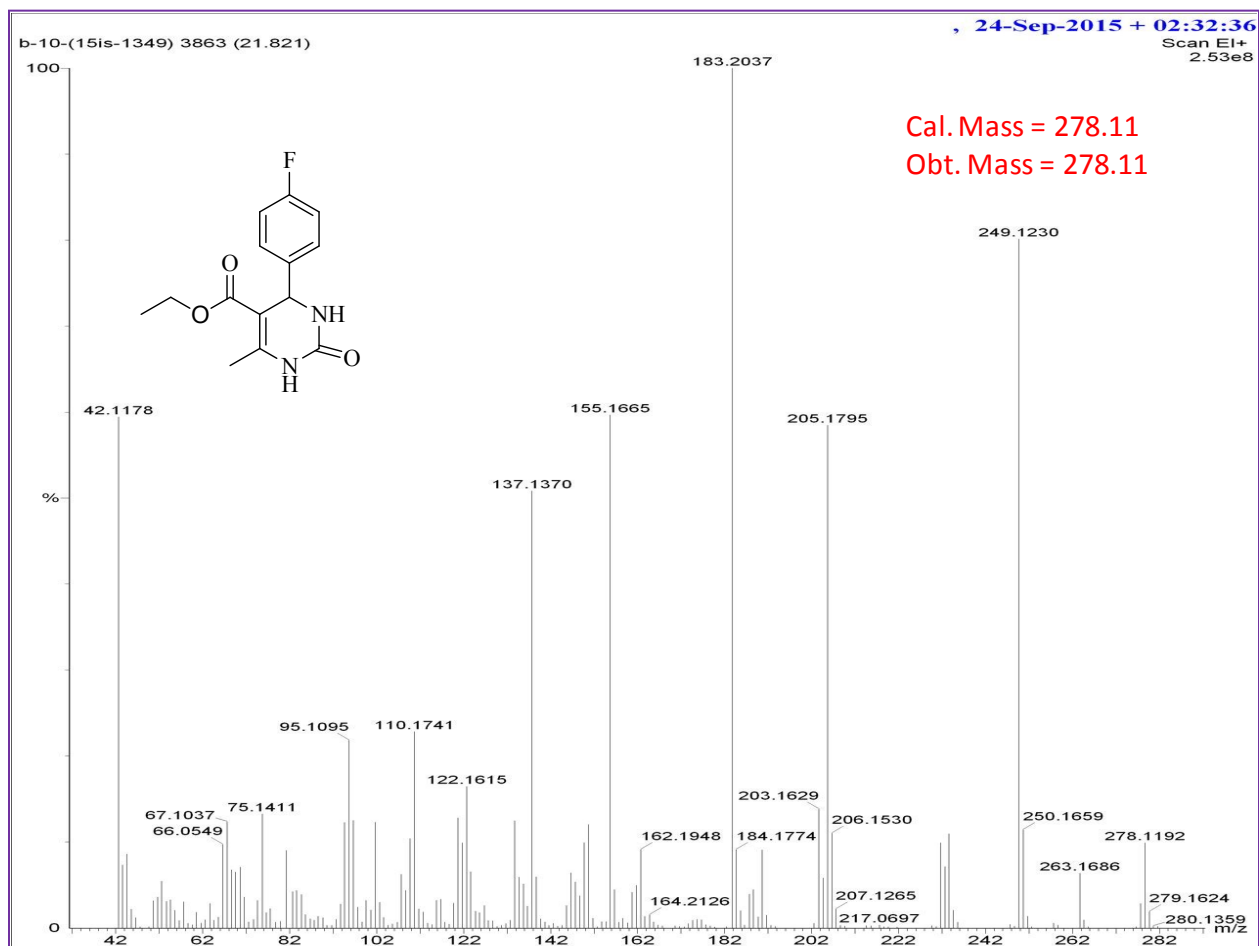




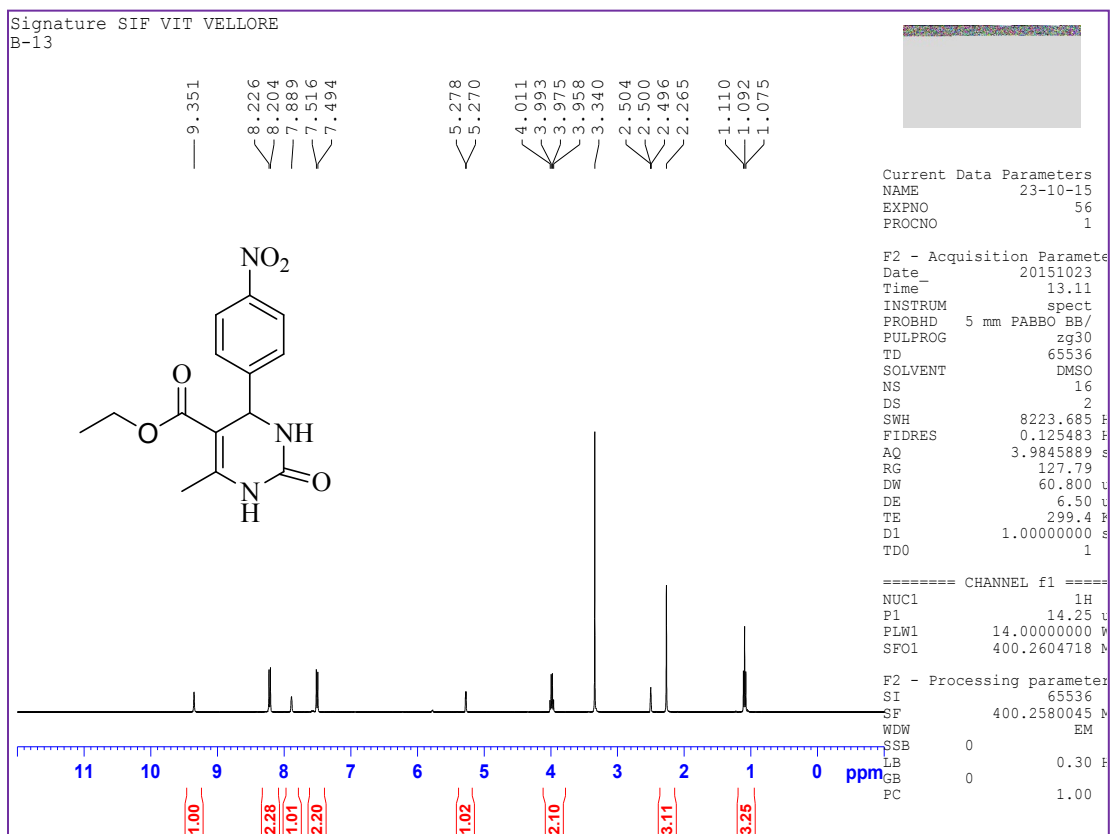
10) 5-Ethoxycarbonyl-4-(4-fluorophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4j).



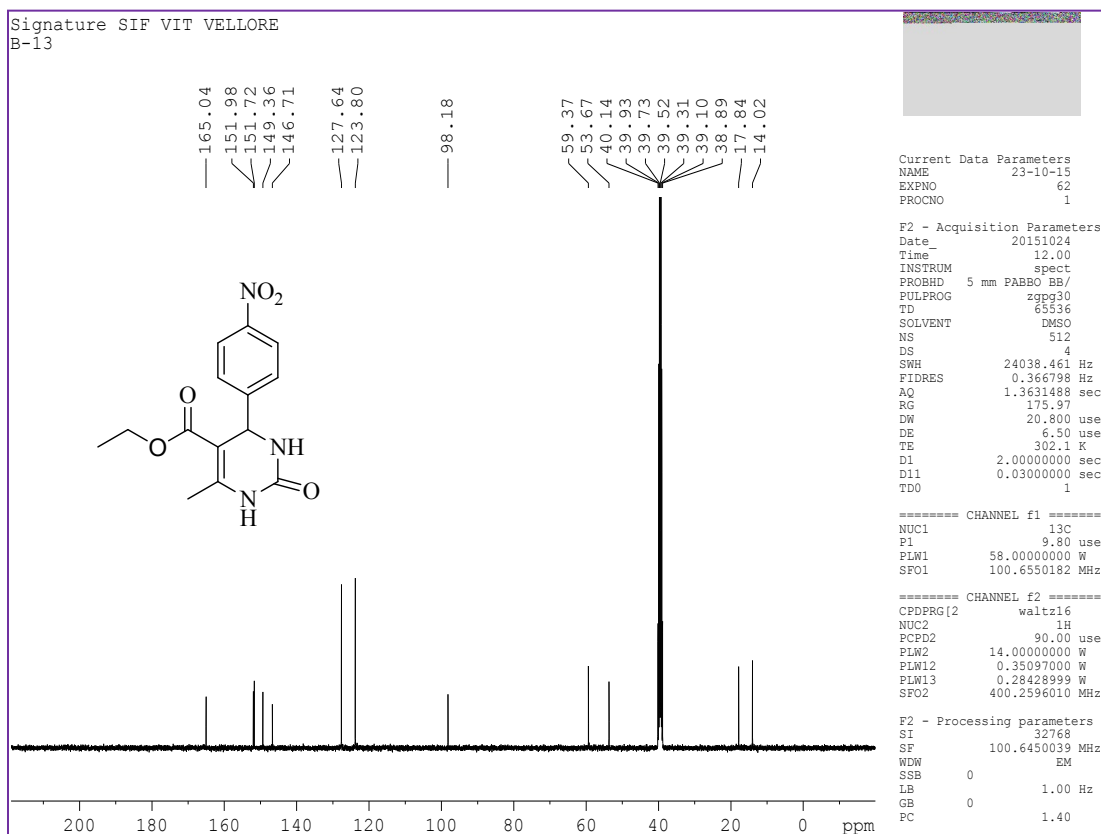
10) 5-Ethoxycarbonyl-4-(4-fluorophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4j).



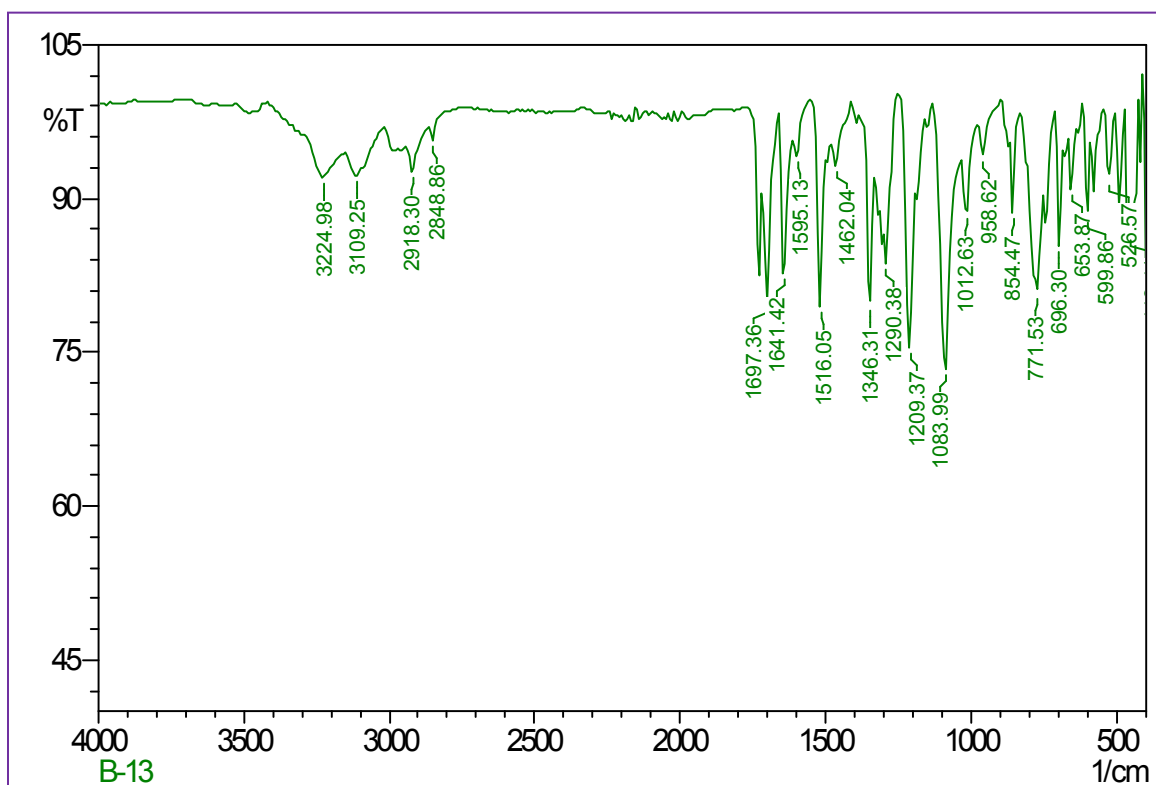
11) 5-Ethoxycarbonyl-4-(4-nitrophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4k).



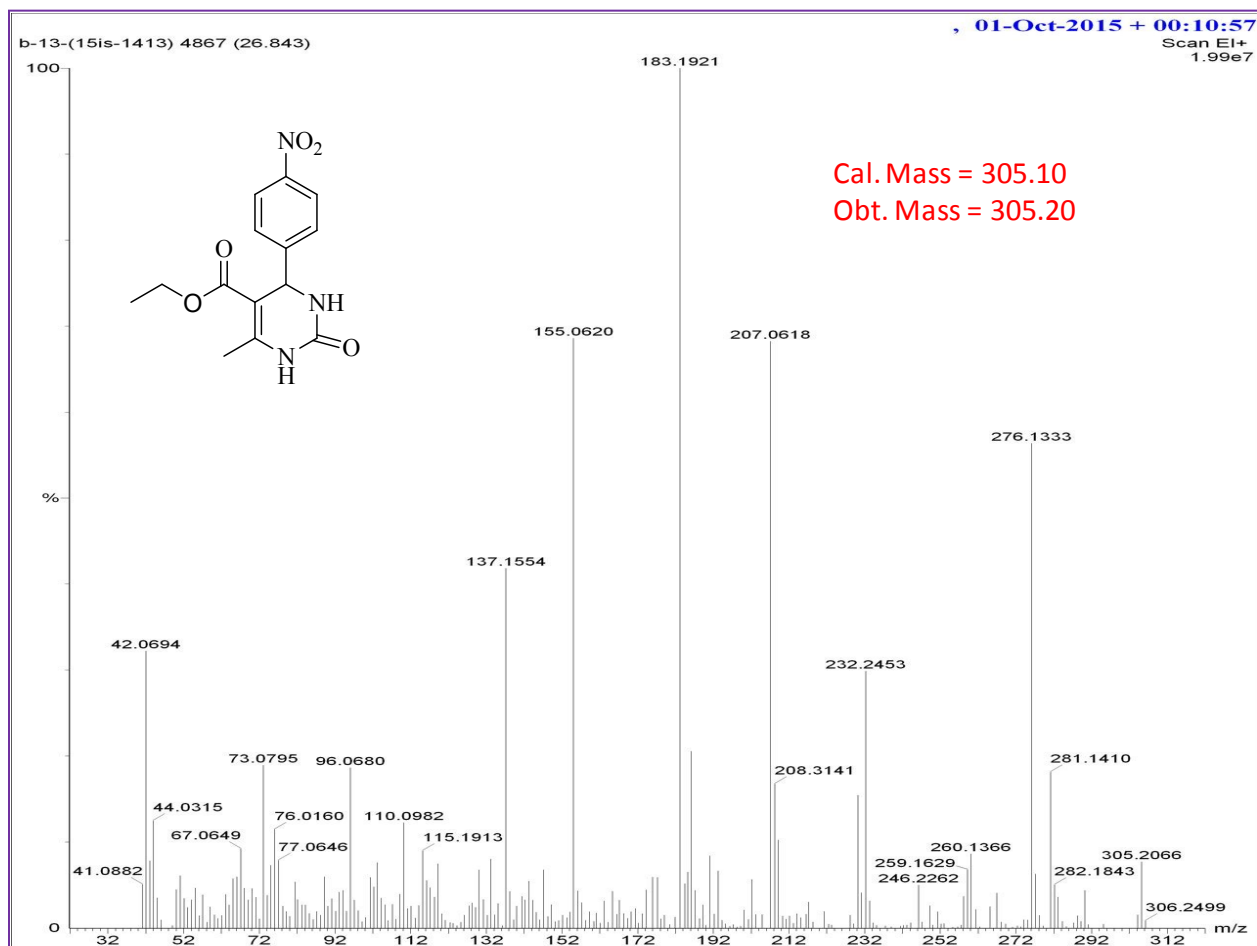
11) 5-Ethoxycarbonyl-4-(4-nitrophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4k).



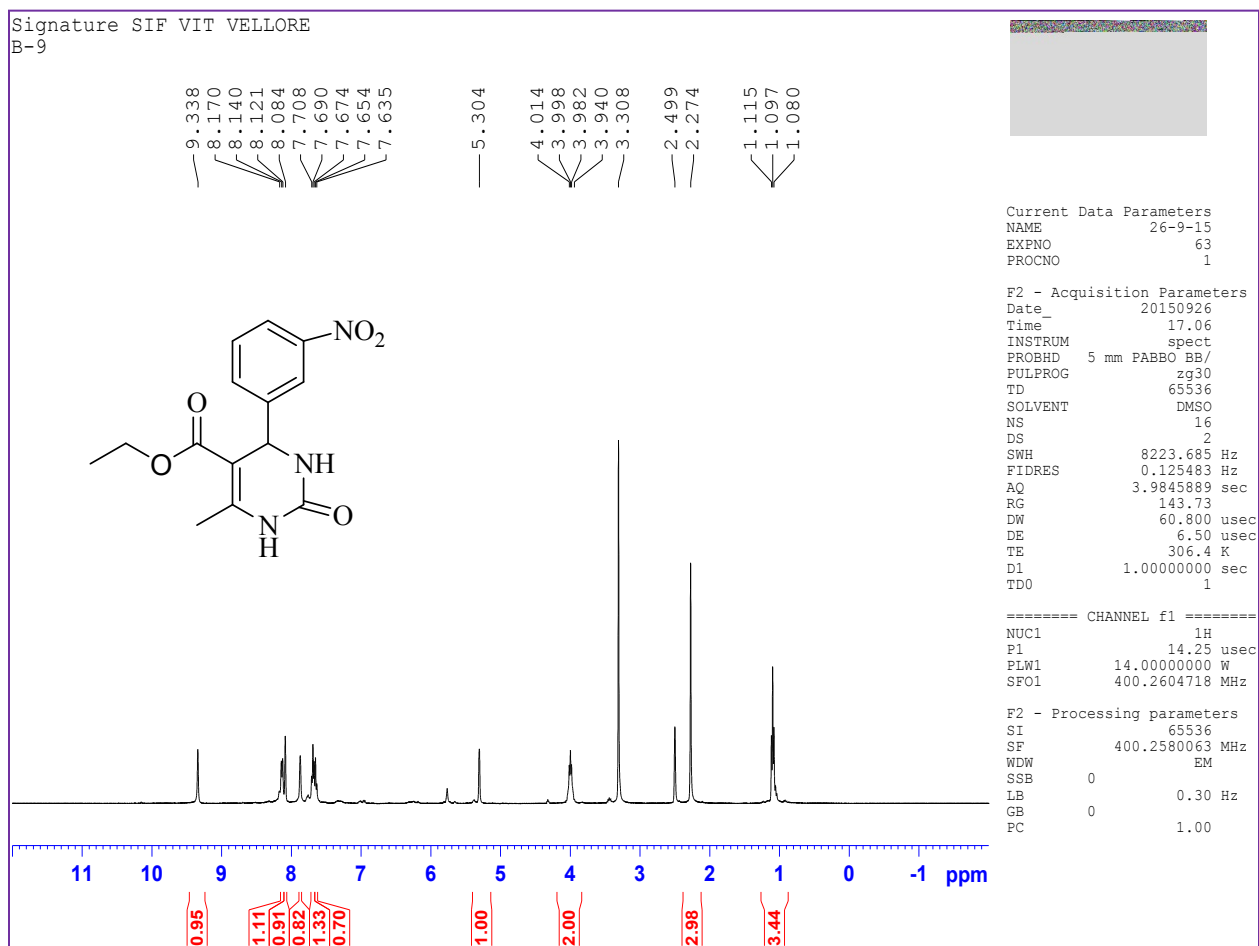
11) 5-Ethoxycarbonyl-4-(4-nitrophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4k).



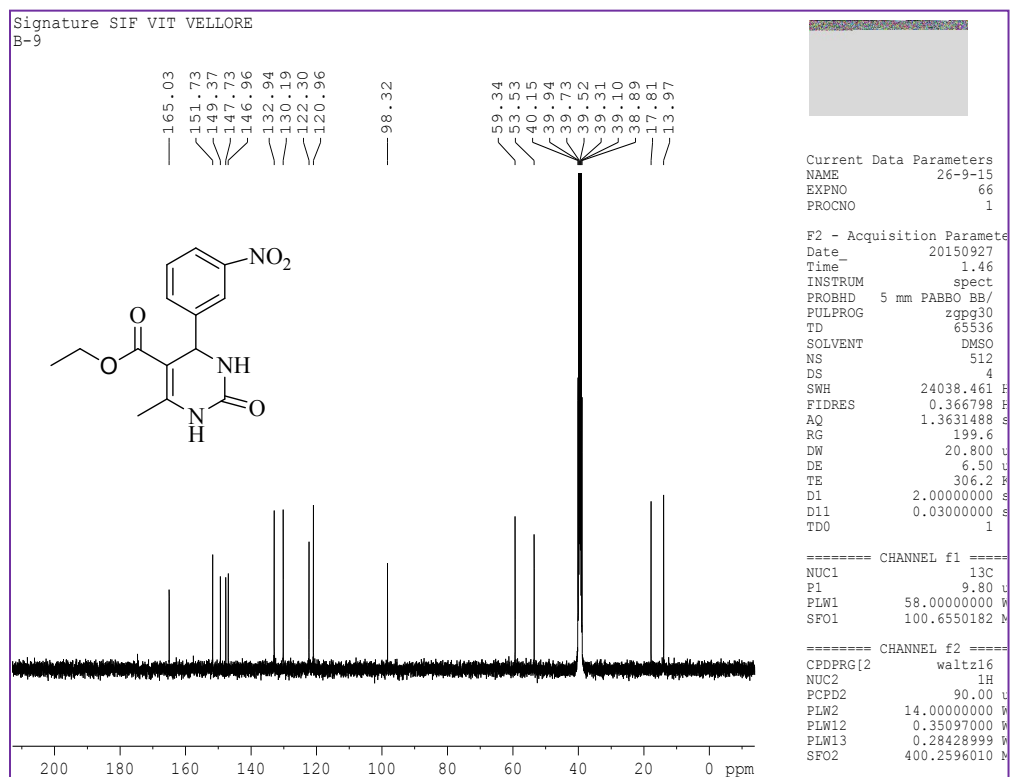
11) 5-Ethoxycarbonyl-4-(4-nitrophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4k).



**12) 5-Ethoxycarbonyl-4-(3-nitrophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4l).**

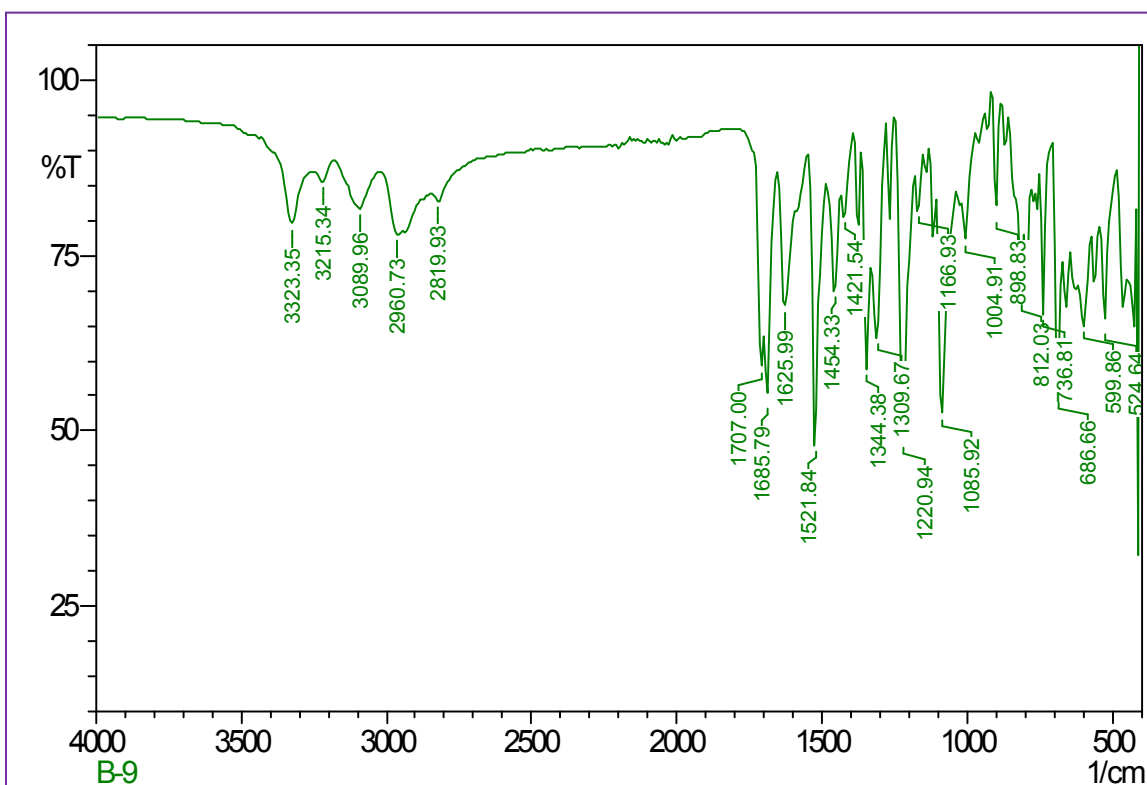


12) 5-Ethoxycarbonyl-4-(3-nitrophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4l).

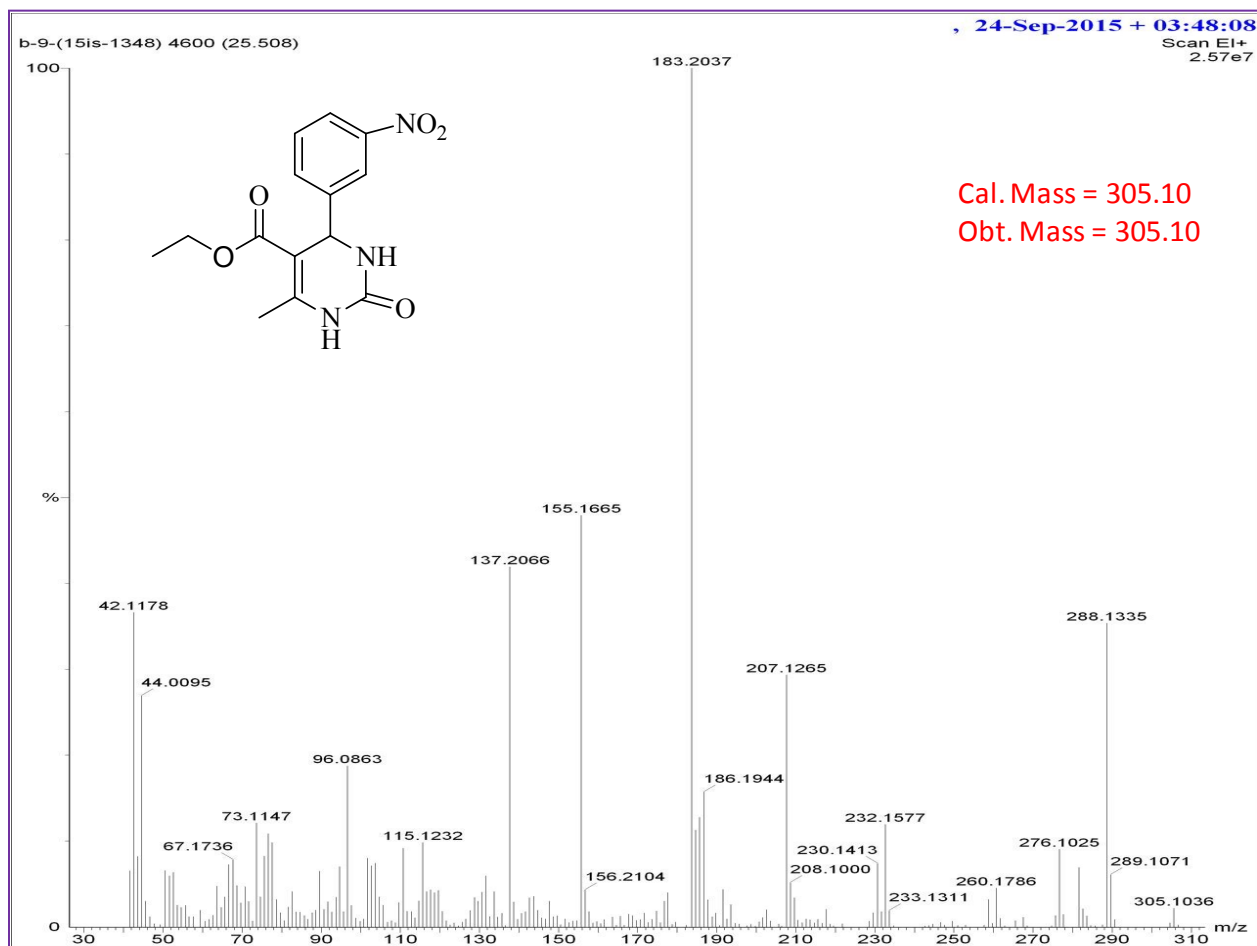




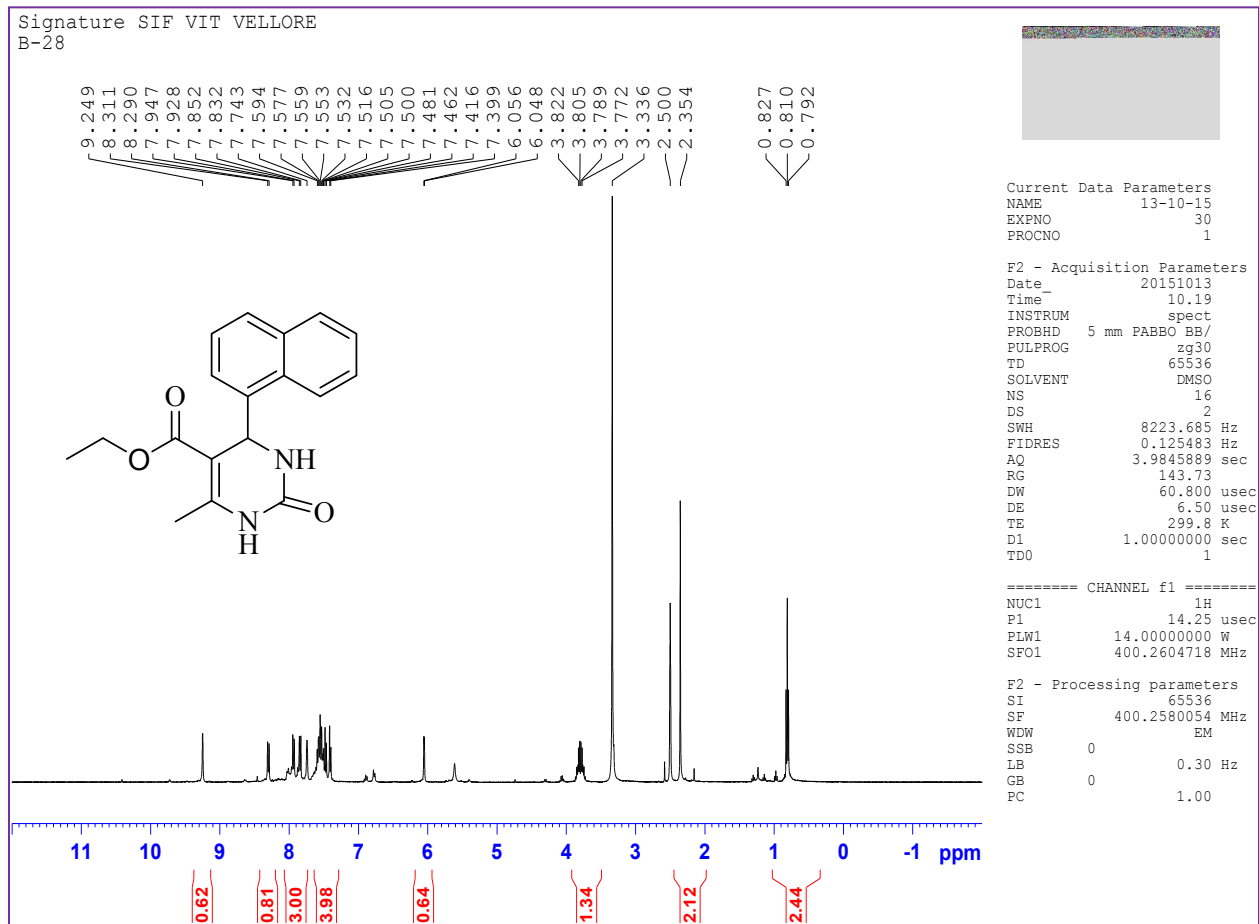
12) 5-Ethoxycarbonyl-4-(3-nitrophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4l).



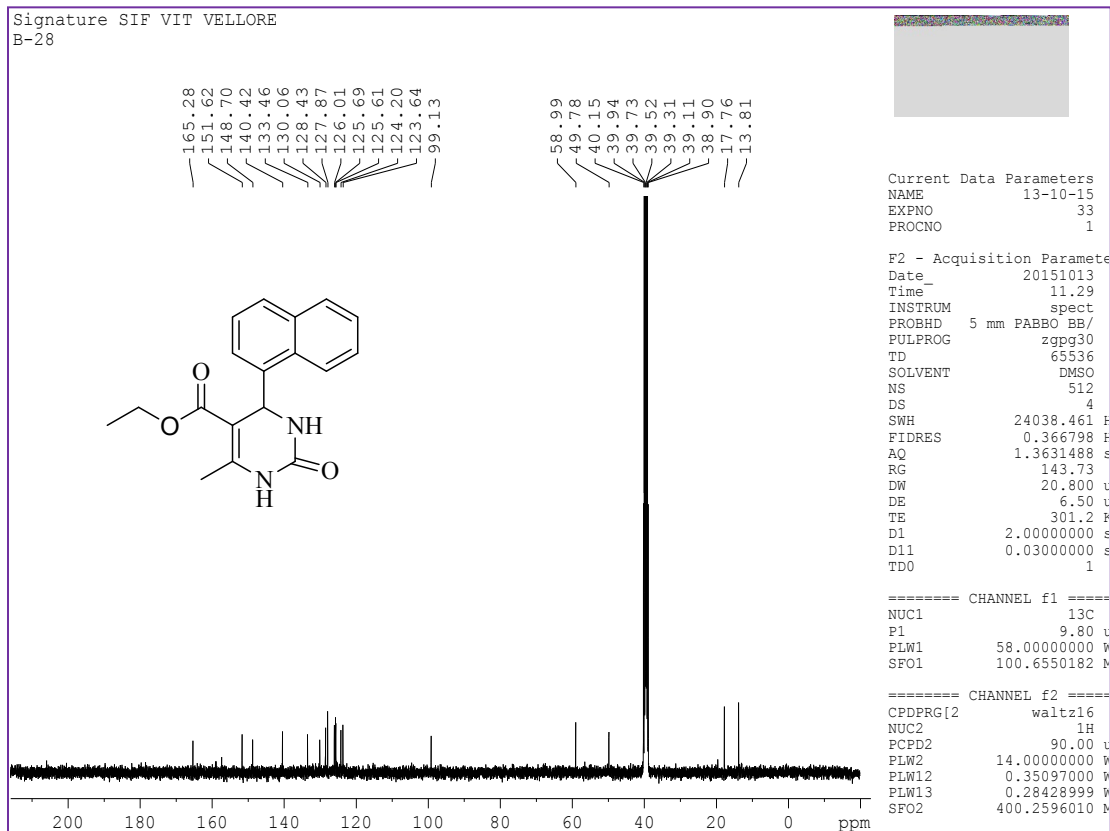
12) 5-Ethoxycarbonyl-4-(3-nitrophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4l).



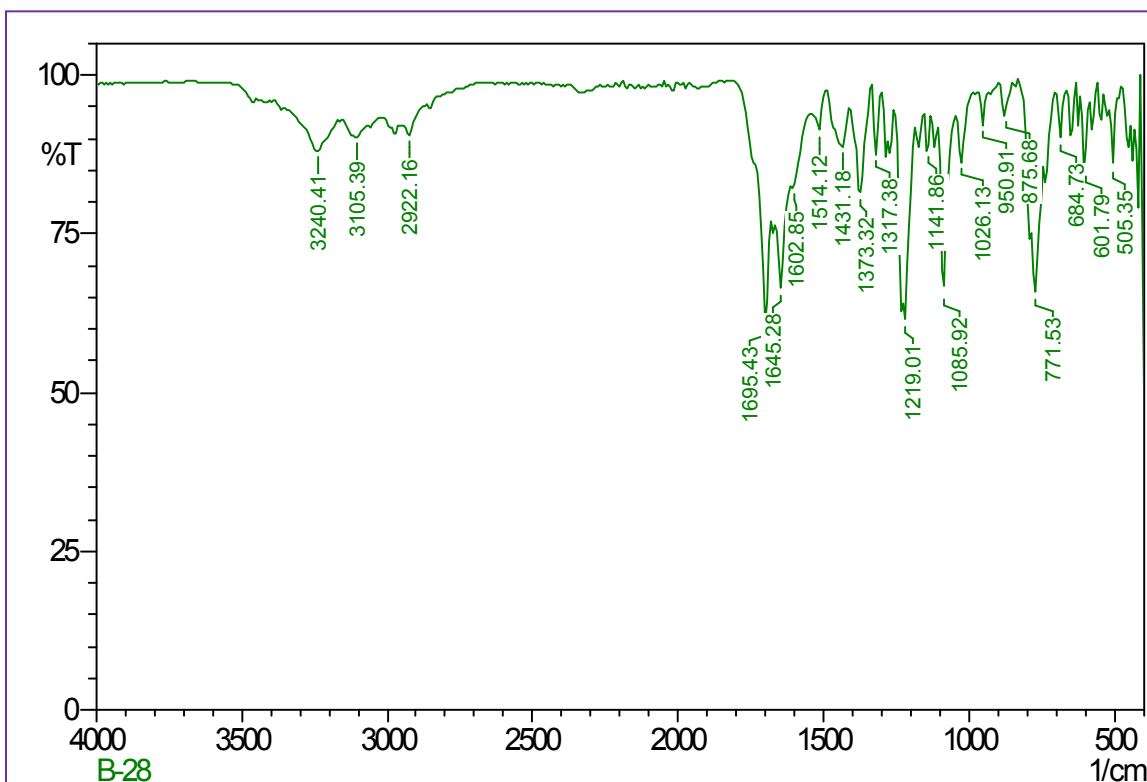
**13) 5-Ethoxycarbonyl-4-(naphthalene-2-yl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4m).**



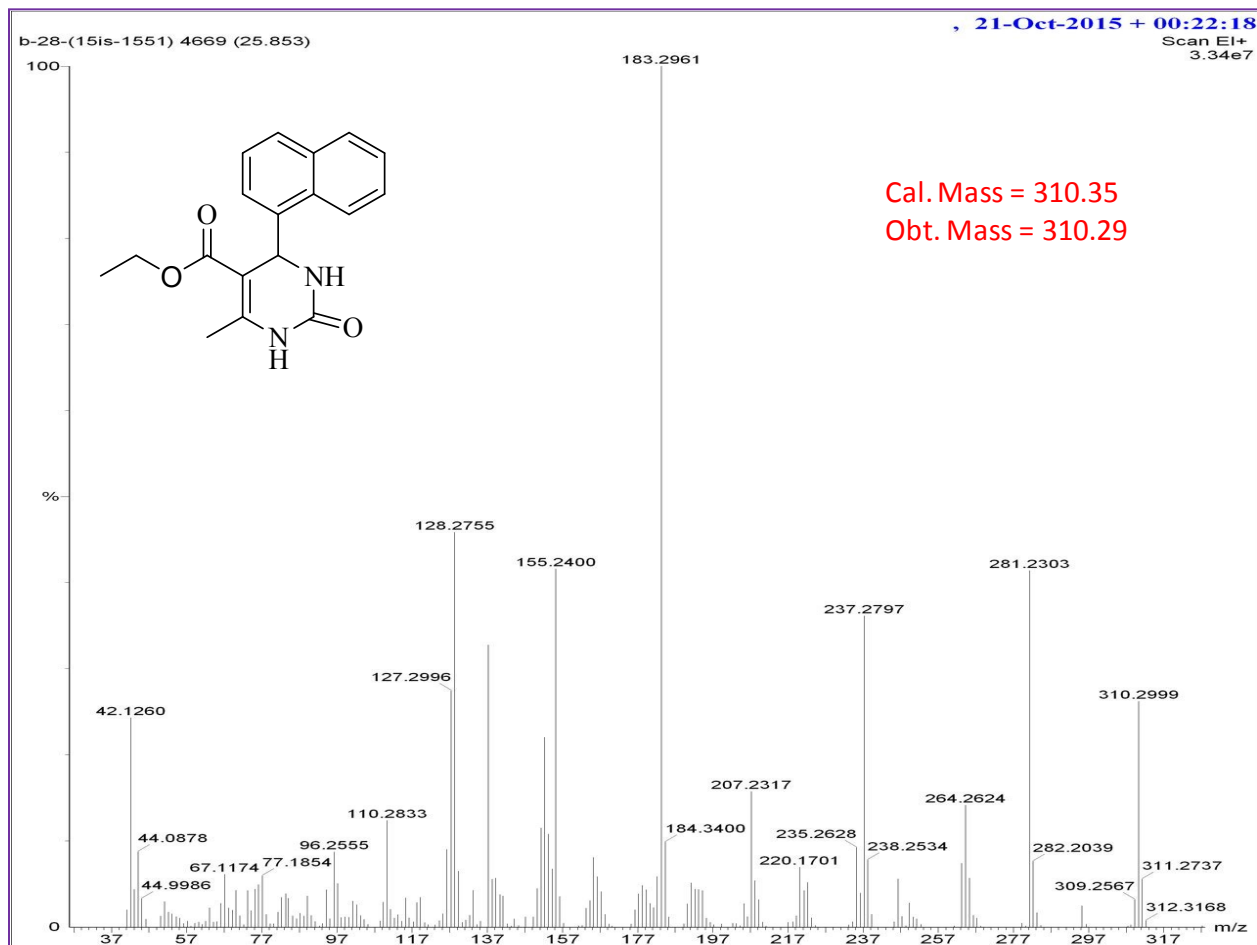
**13) 5-Ethoxycarbonyl-4-(naphthalene-2-yl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4m).**



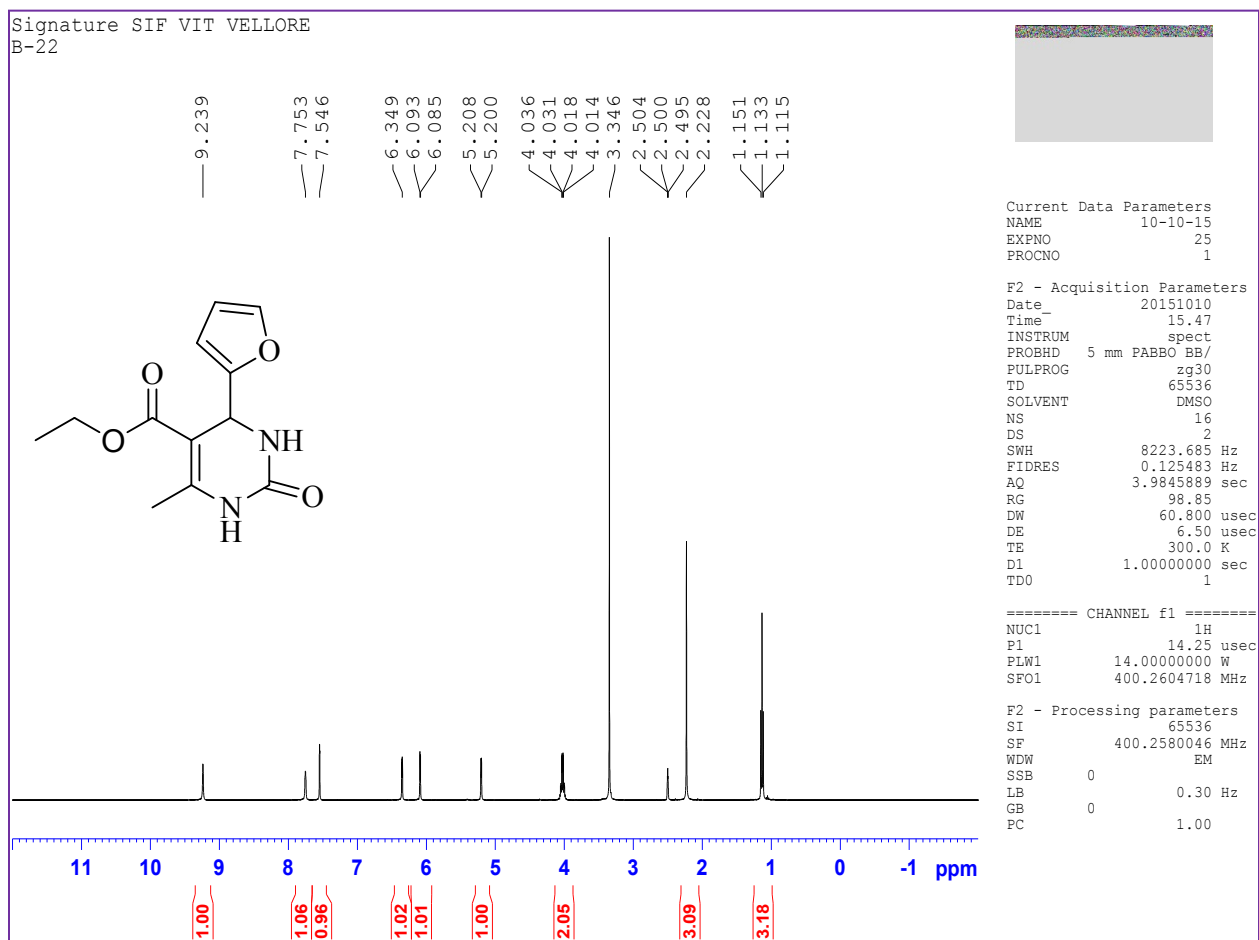
13) 5-Ethoxycarbonyl-4-(naphthalene-2-yl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4m).



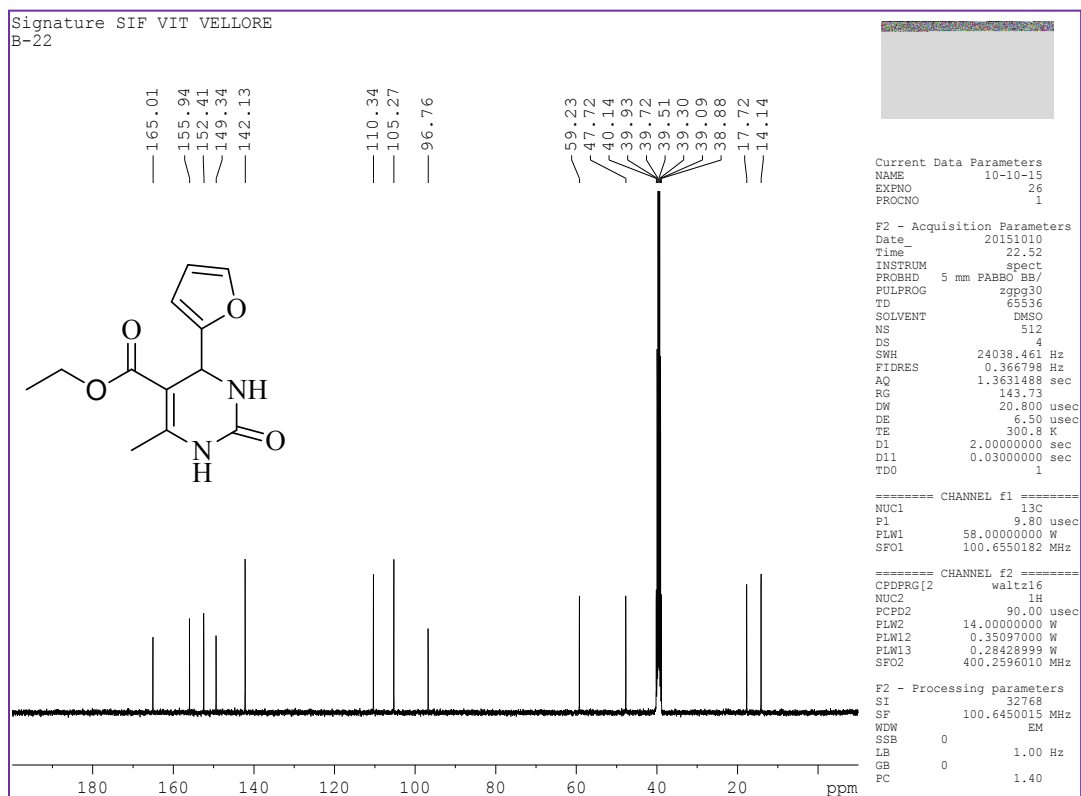
13) 5-Ethoxycarbonyl-4-(naphthalene-2-yl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4m).



**14) 5-Ethoxycarbonyl-4-(2-furyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4n).**

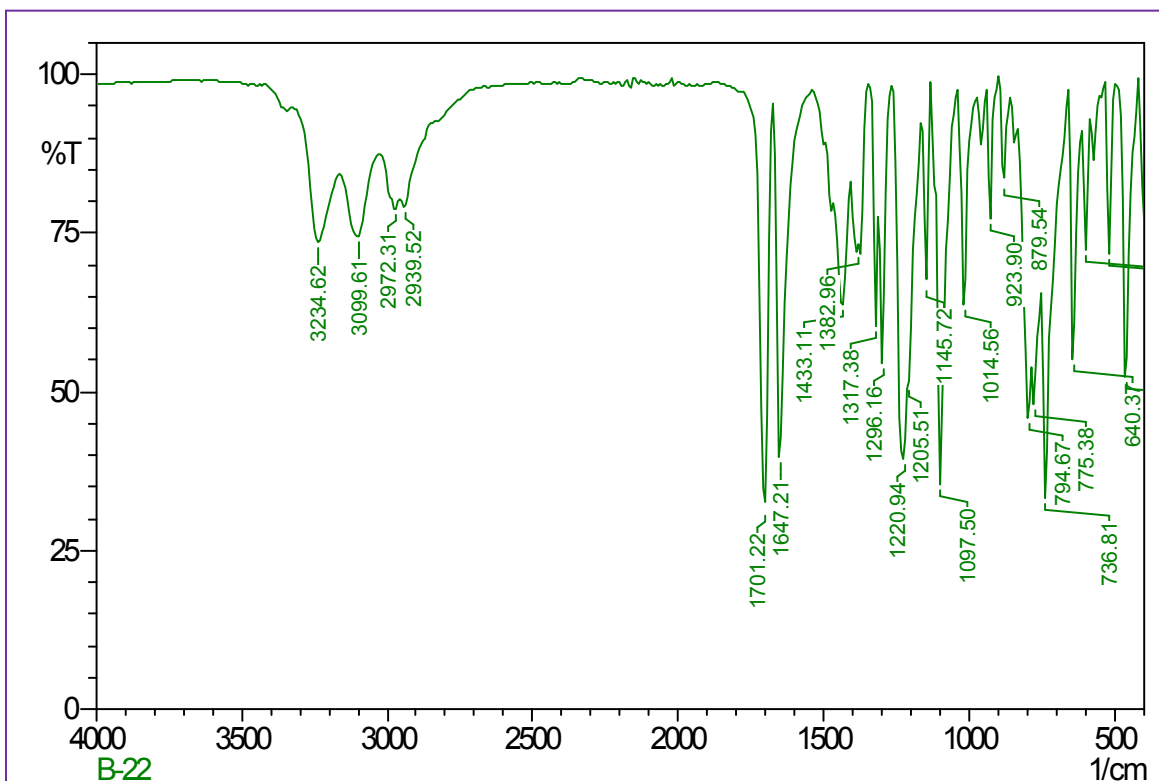


14) 5-Ethoxycarbonyl-4-(2-furyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4n).

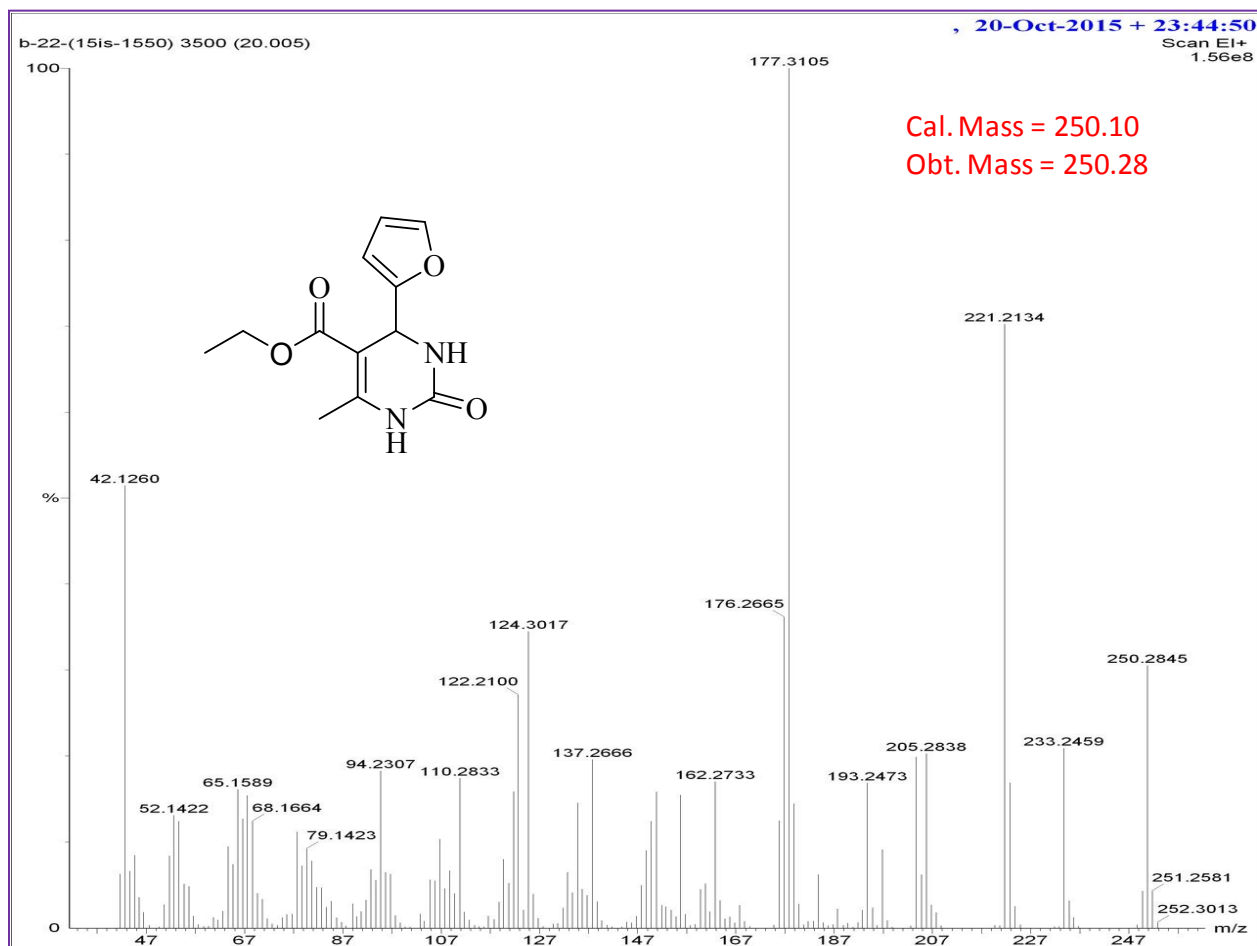




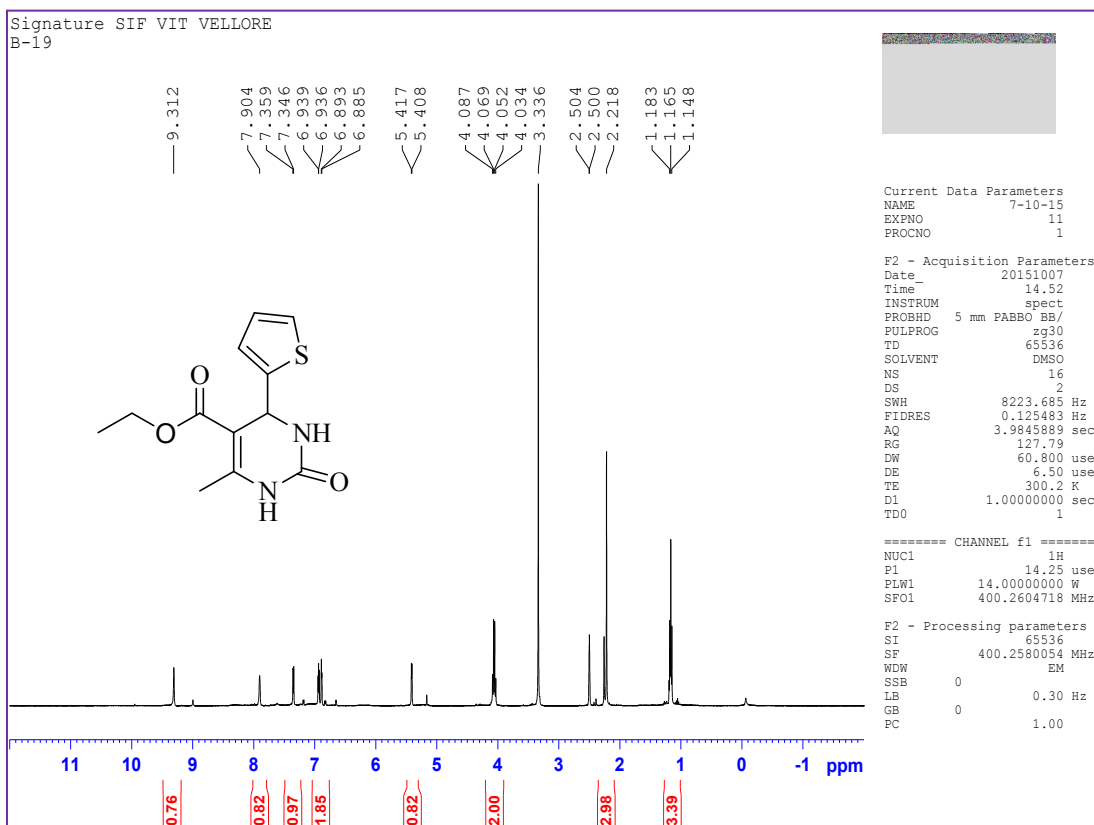
14) 5-Ethoxycarbonyl-4-(2-furyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4n).



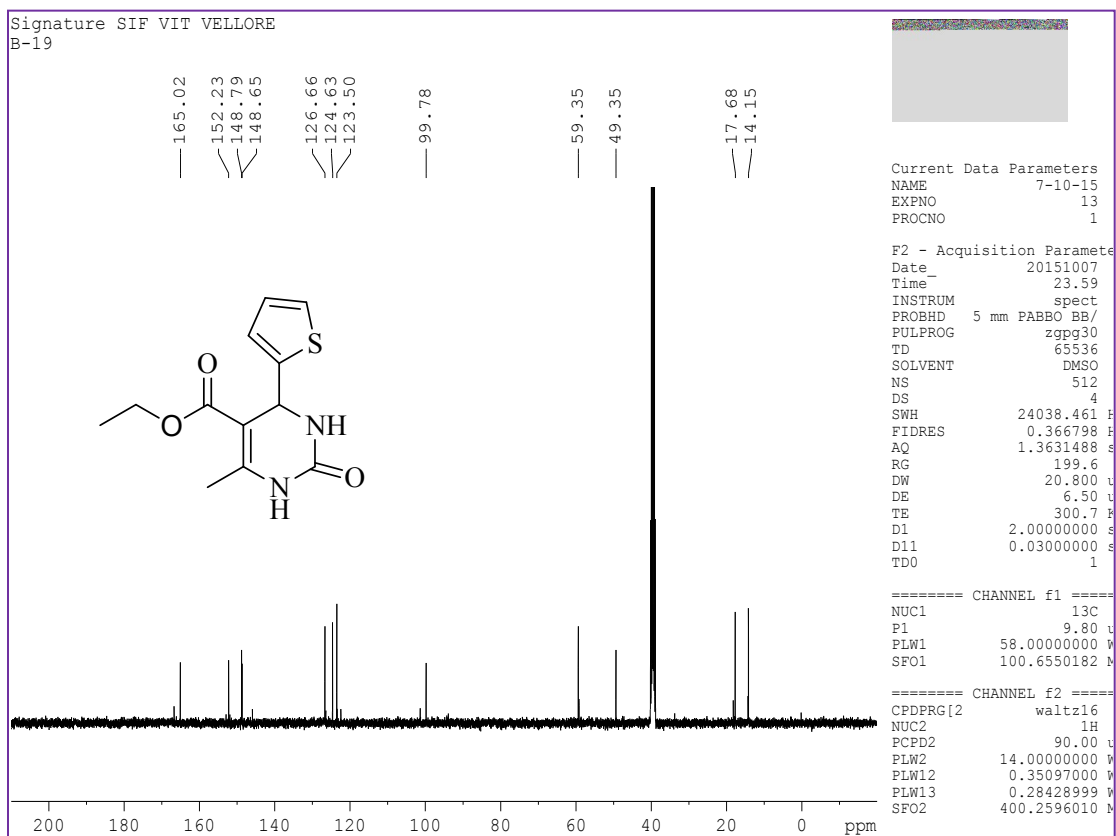
14) 5-Ethoxycarbonyl-4-(2-furyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4n).



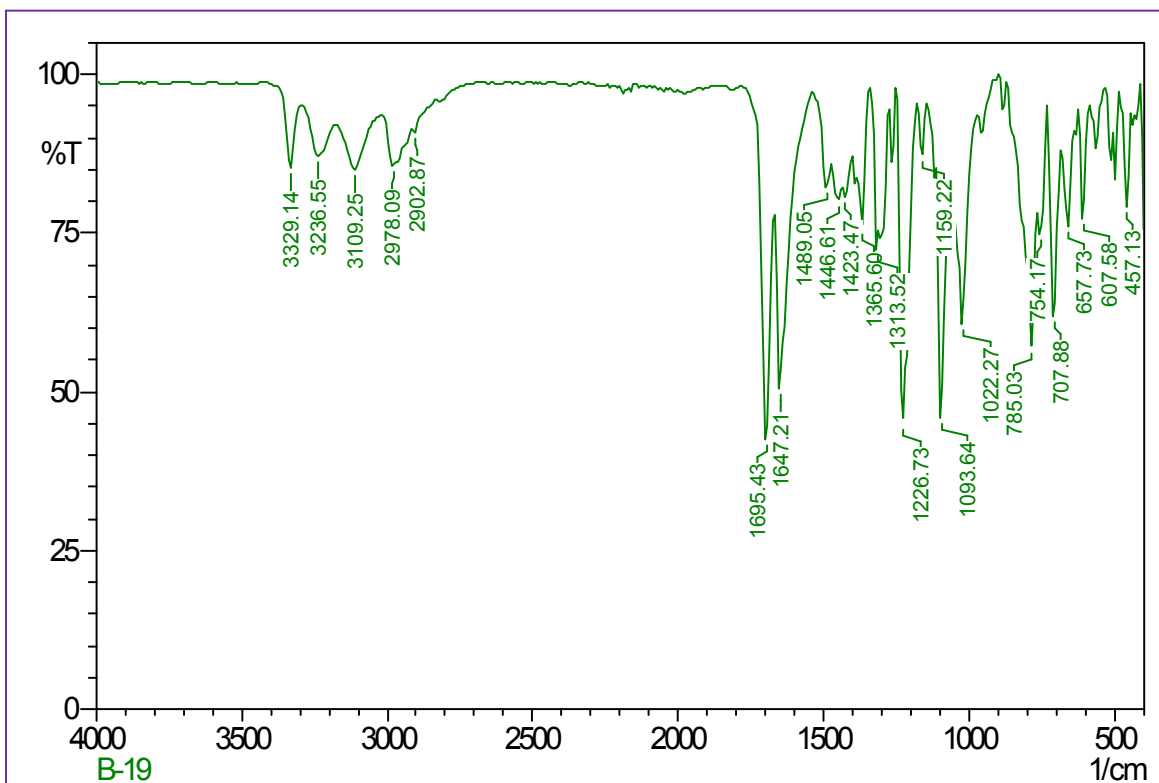
15) 5-Ethoxycarbonyl-4-(2-thiophene)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4o).



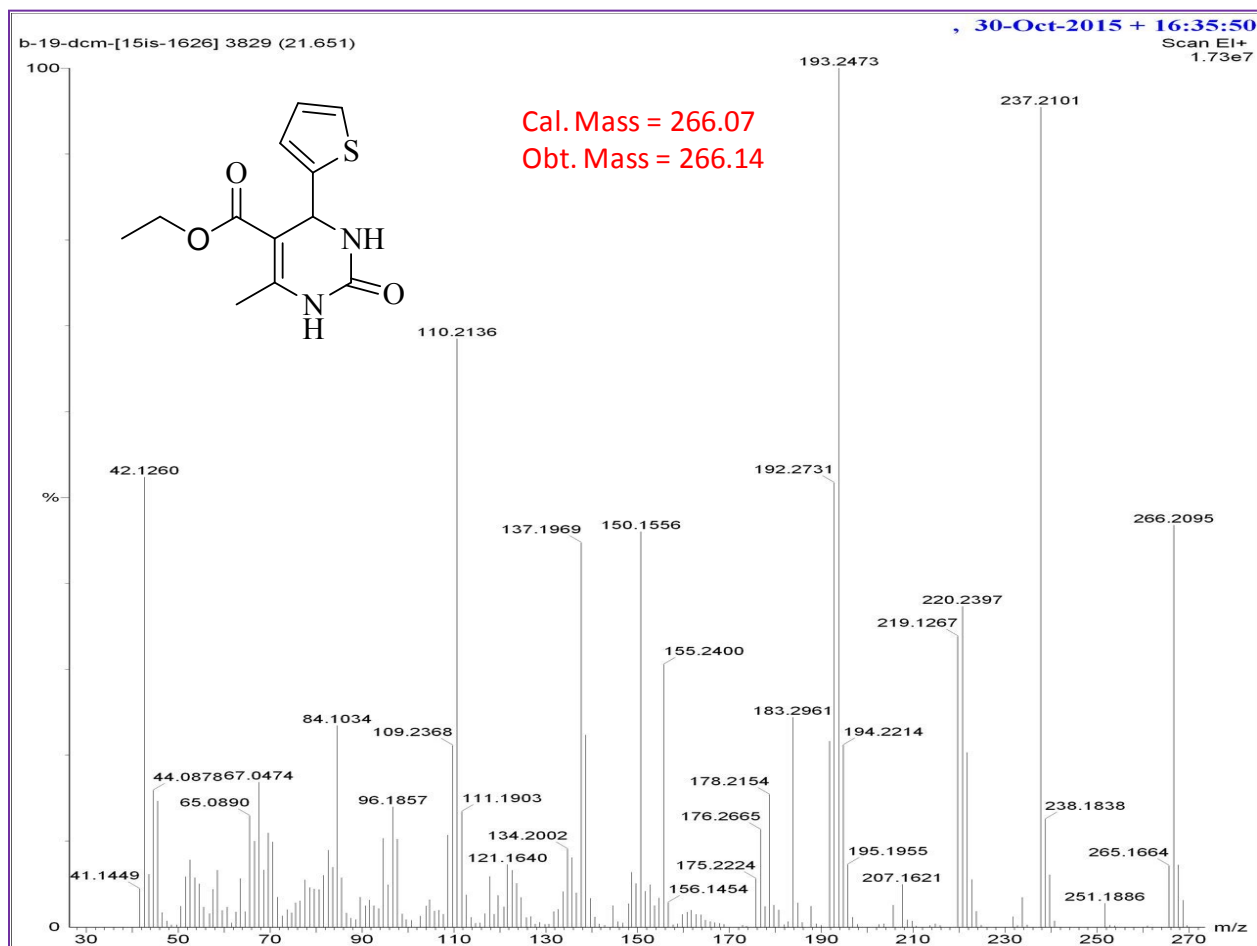
15) 5-Ethoxycarbonyl-4-(2-thiophene)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4o).



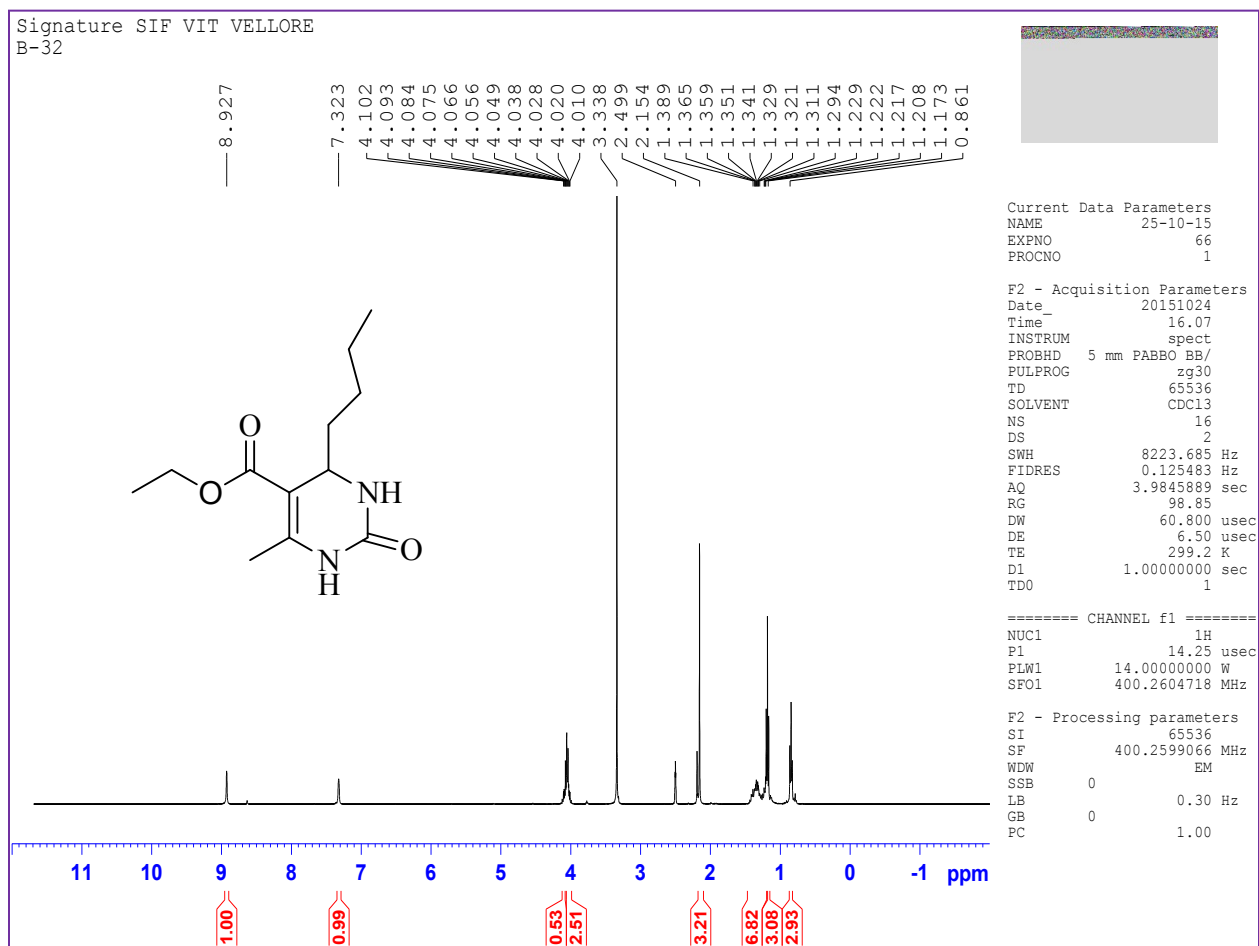
15) 5-Ethoxycarbonyl-4-(2-thiophene)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4o).



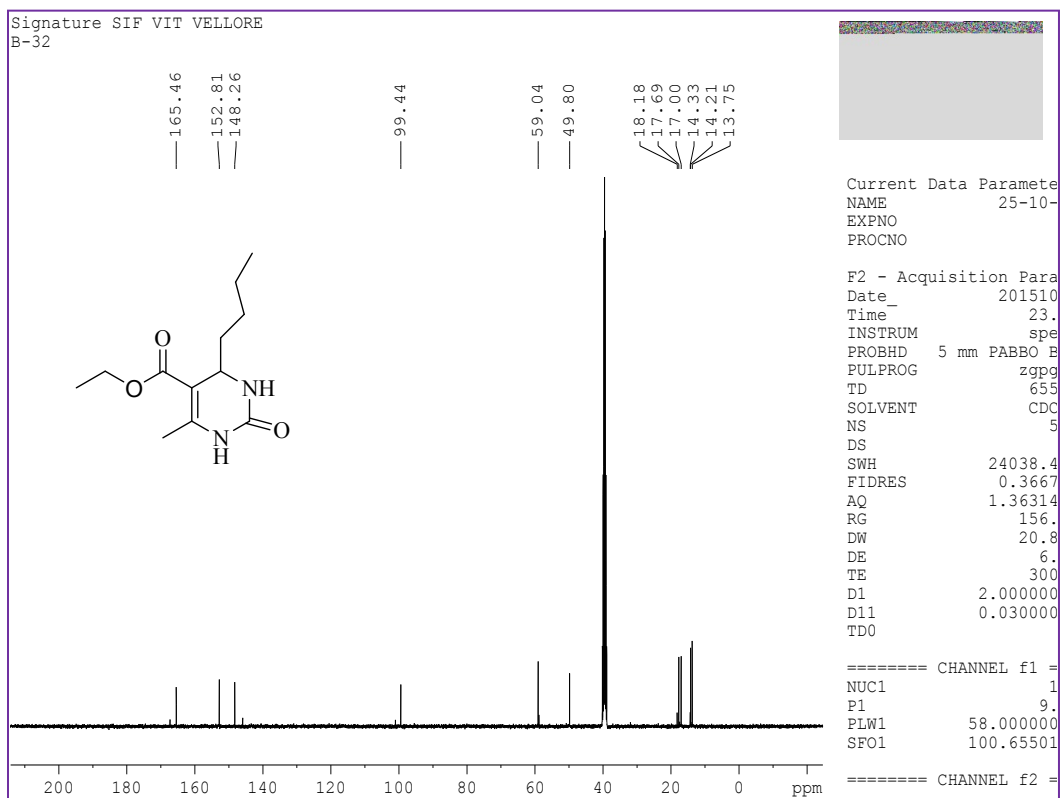
15) 5-Ethoxycarbonyl-4-(2-thiophene)-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4o).



**16) 4-n-Butyl-5-Ethoxycarbonyl-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4p).**

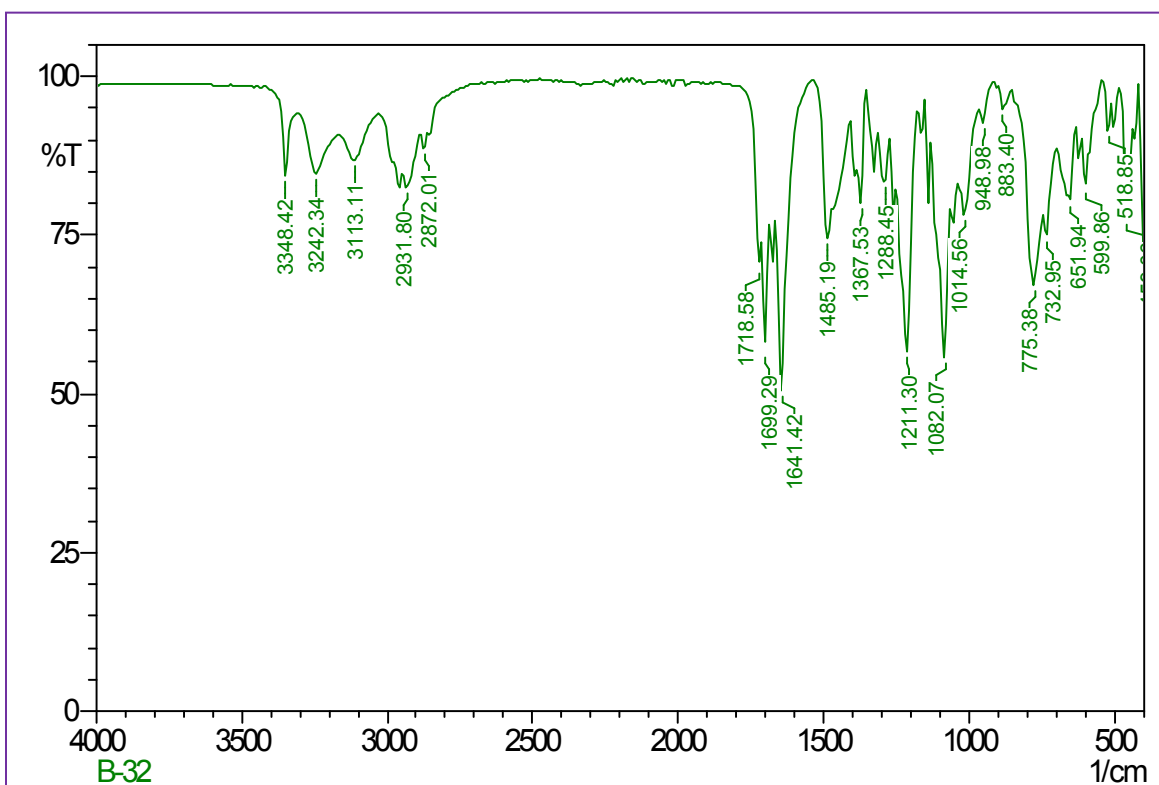


**16) 4-n-Butyl-5-Ethoxycarbonyl-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4p).**

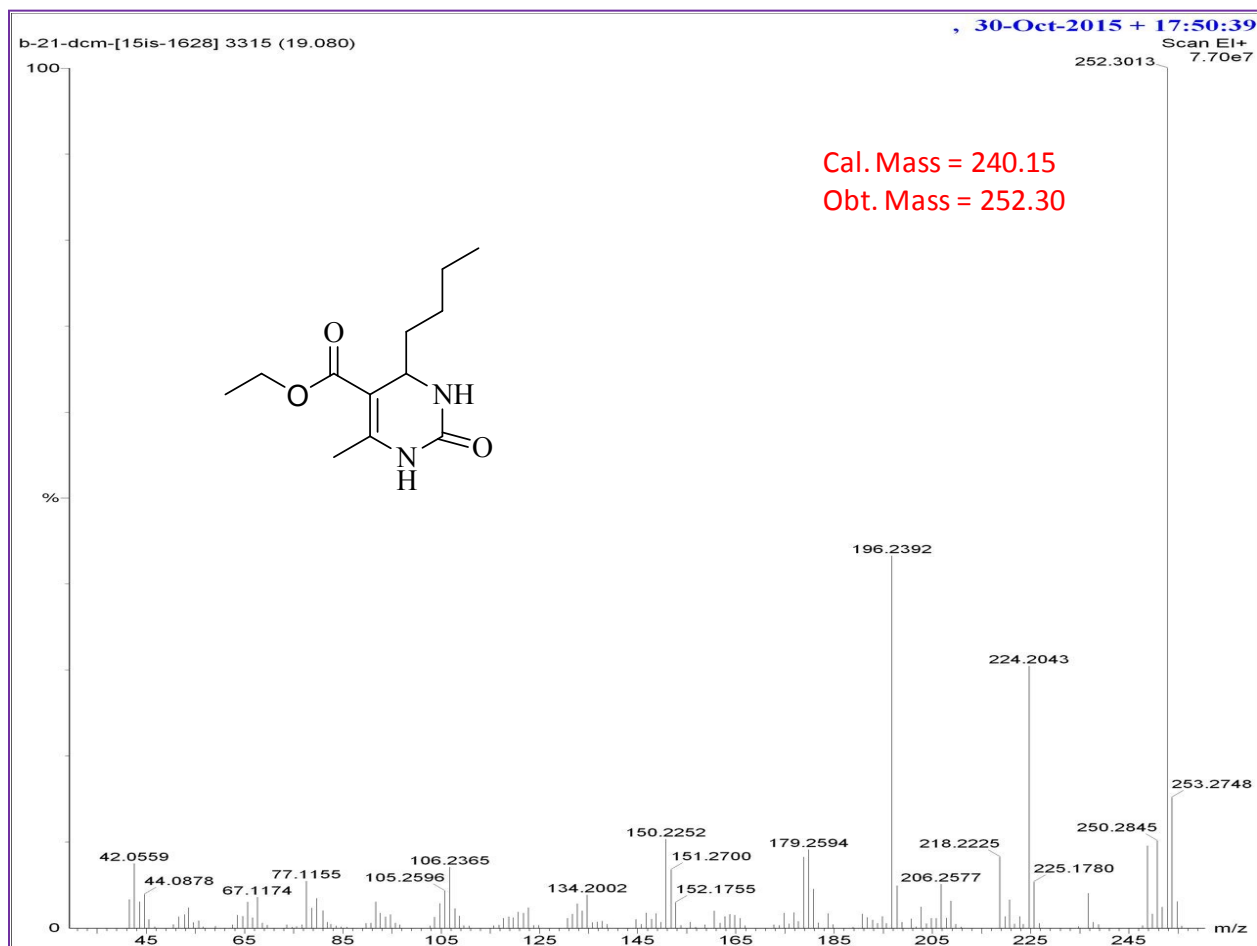




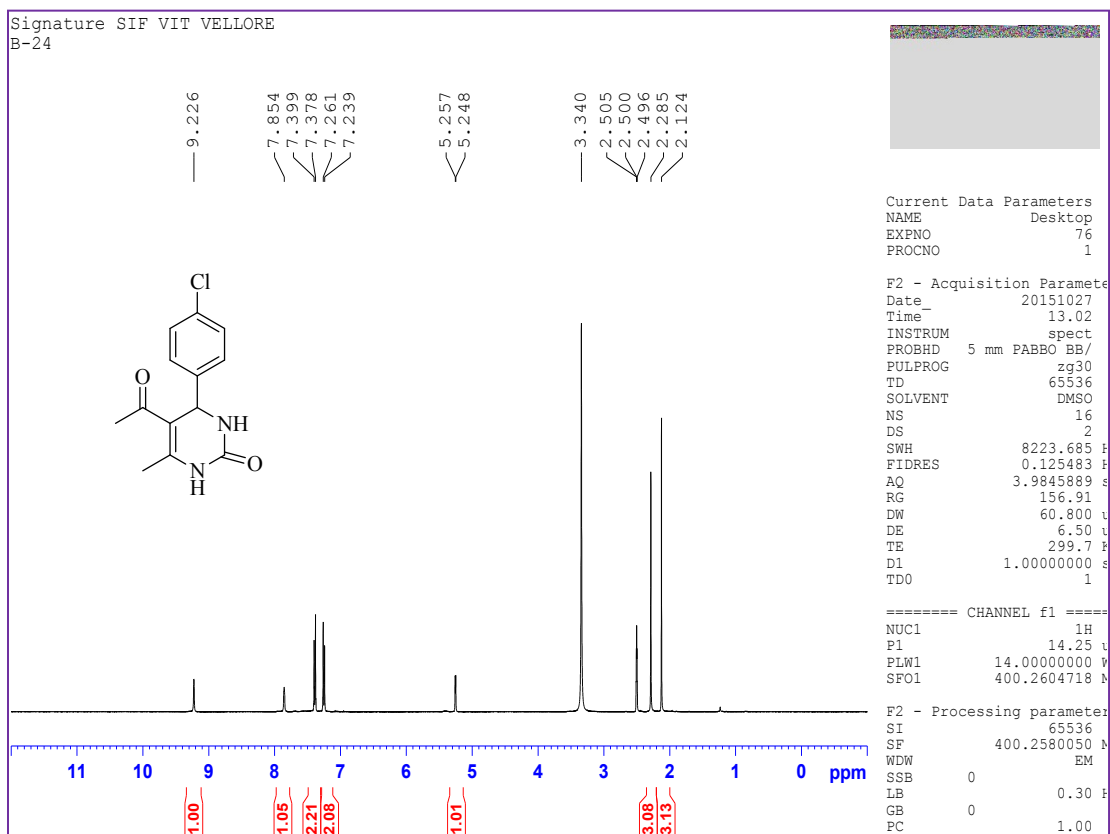
16) 4-n-Butyl-5-Ethoxycarbonyl-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4p).



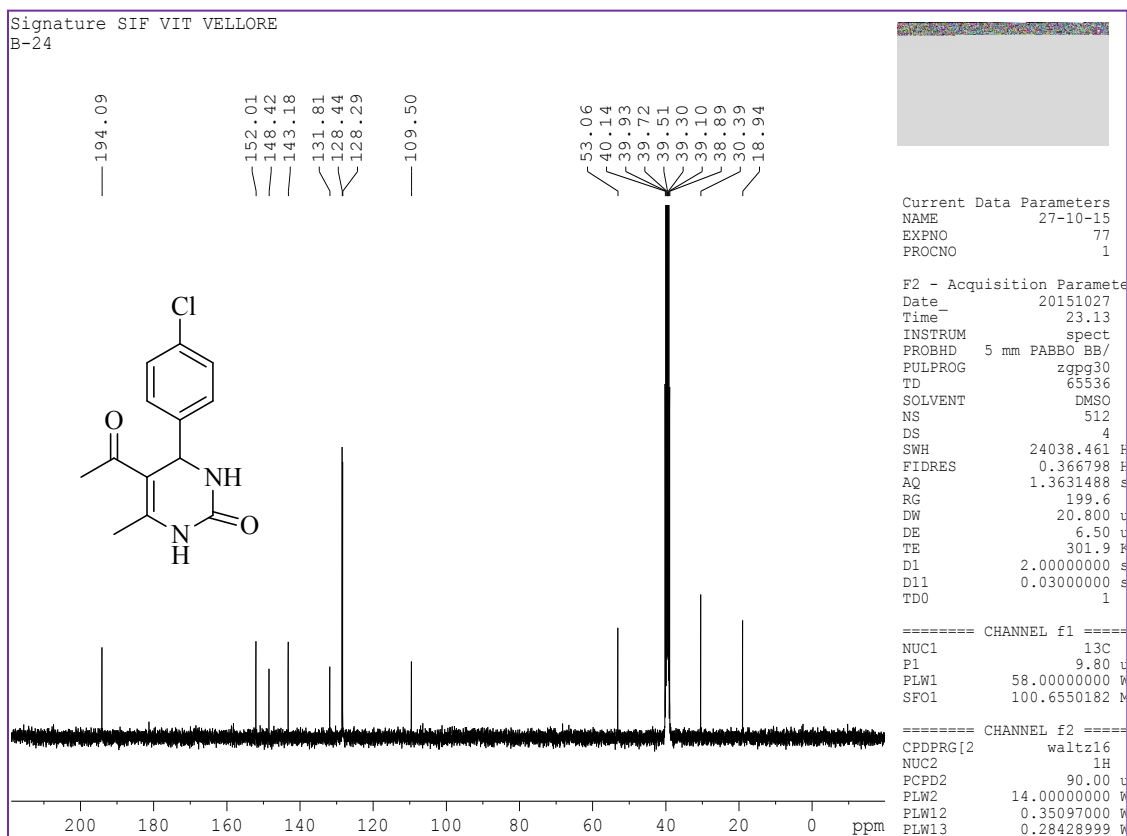
16) 4-n-Butyl-5-Ethoxycarbonyl-6-methyl-3,4-dihydropyrimidin-2(1H)-one (4p).



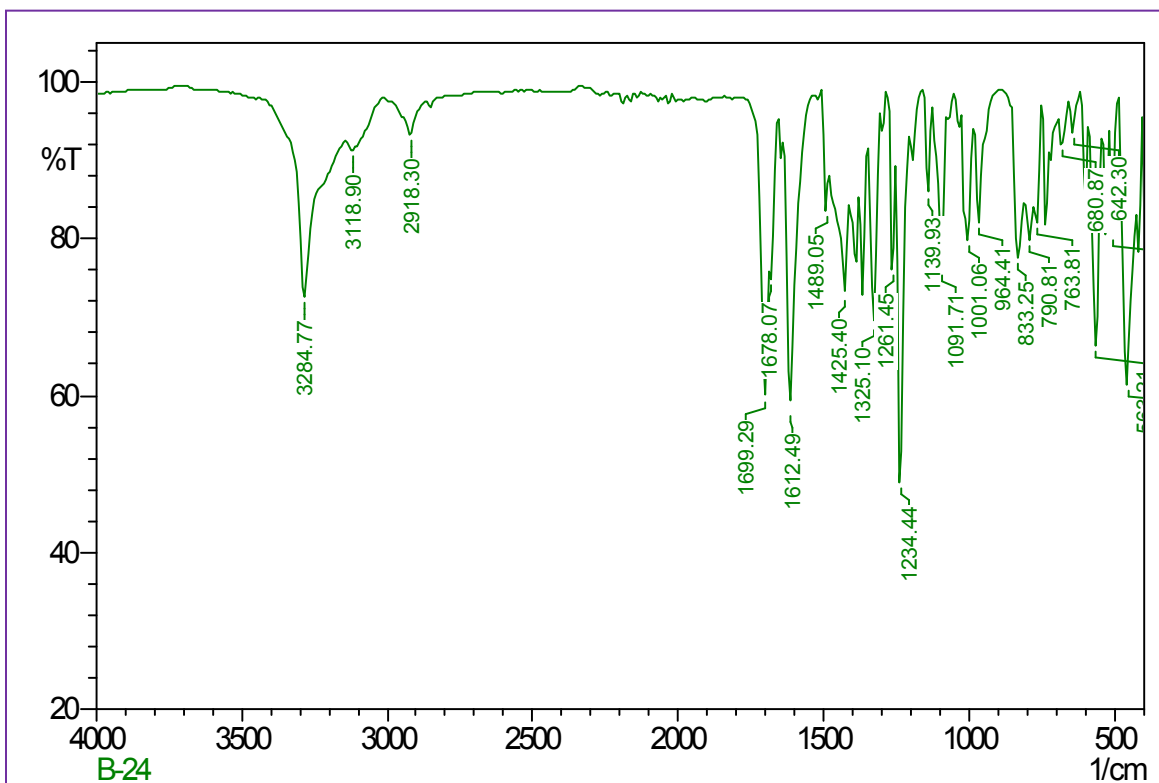
17) 5-Aceto-6-methyl-4-(4-chlorophenyl)-3,4-dihydropyrimidin-2(1H)-one (4q).



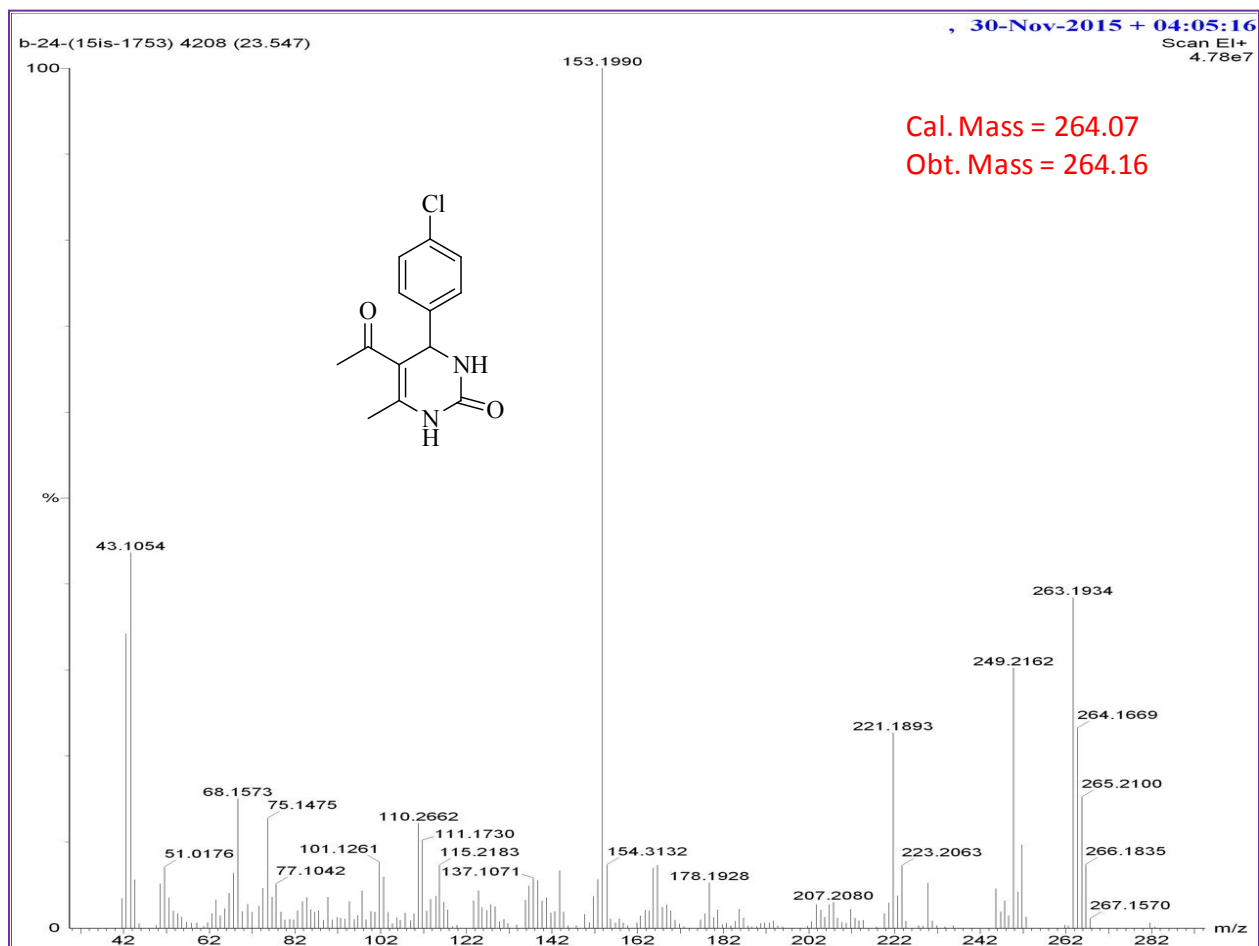
17) 5-Aceto-6-methyl-4-(4-chlorophenyl)-3,4-dihydropyrimidin-2(1H)-one (4q).



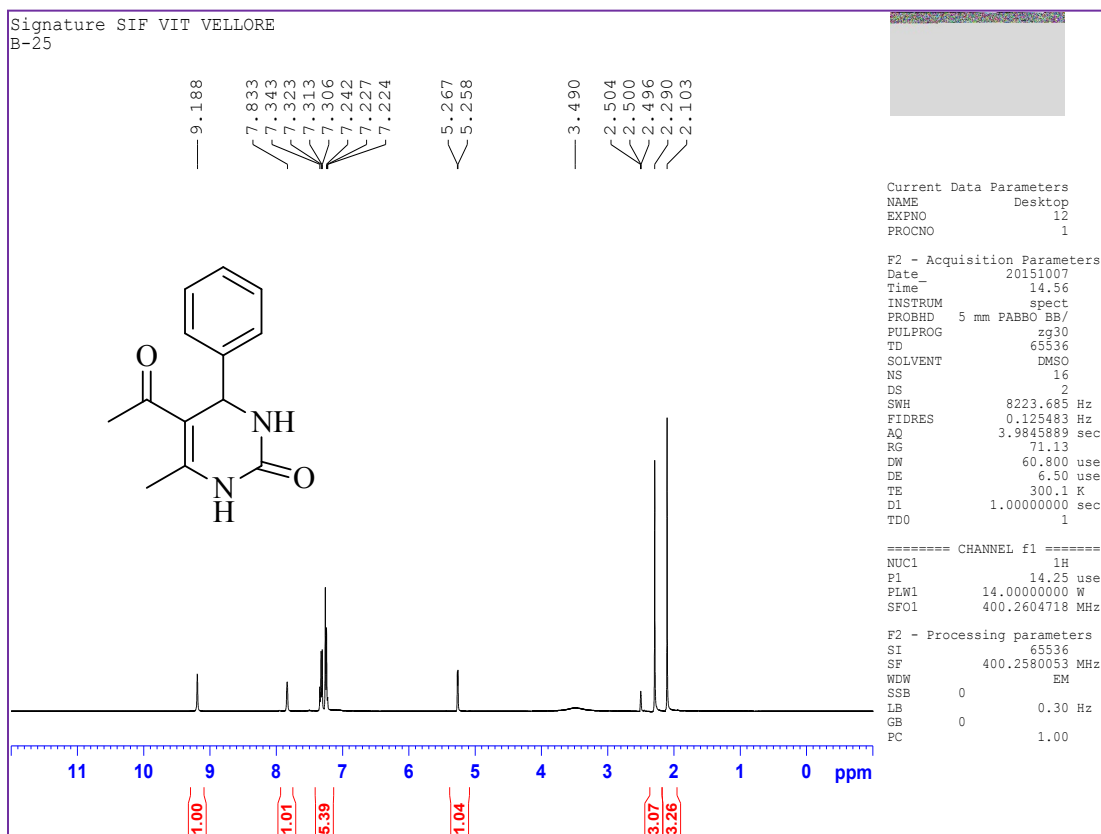
17) 5-Aceto-6-methyl-4-(4-chlorophenyl)-3,4-dihydropyrimidin-2(1H)-one (4q).



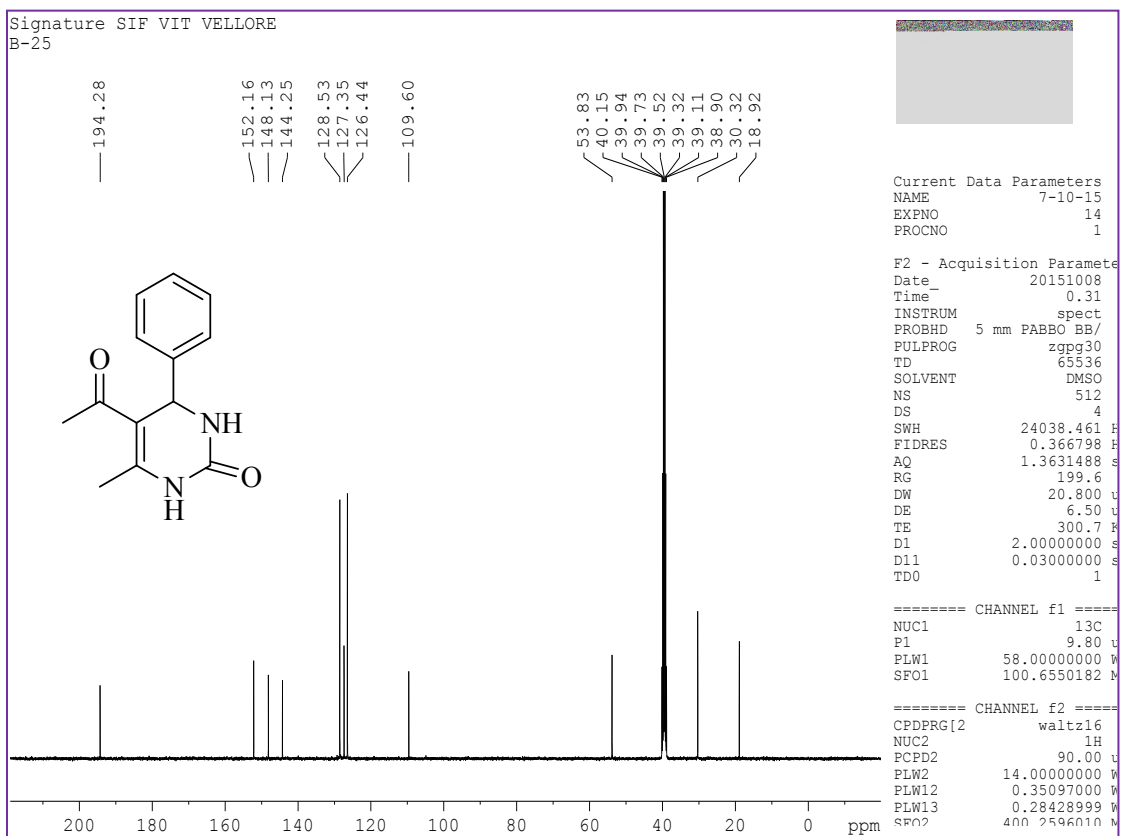
17) 5-Aceto-6-methyl-4-(4-chlorophenyl)-3,4-dihydropyrimidin-2(1H)-one (4q).



**18) 5-Aceto-6-methyl-4-phenyl-3,4-dihydropyrimidin-2(1H)-one (4r).**

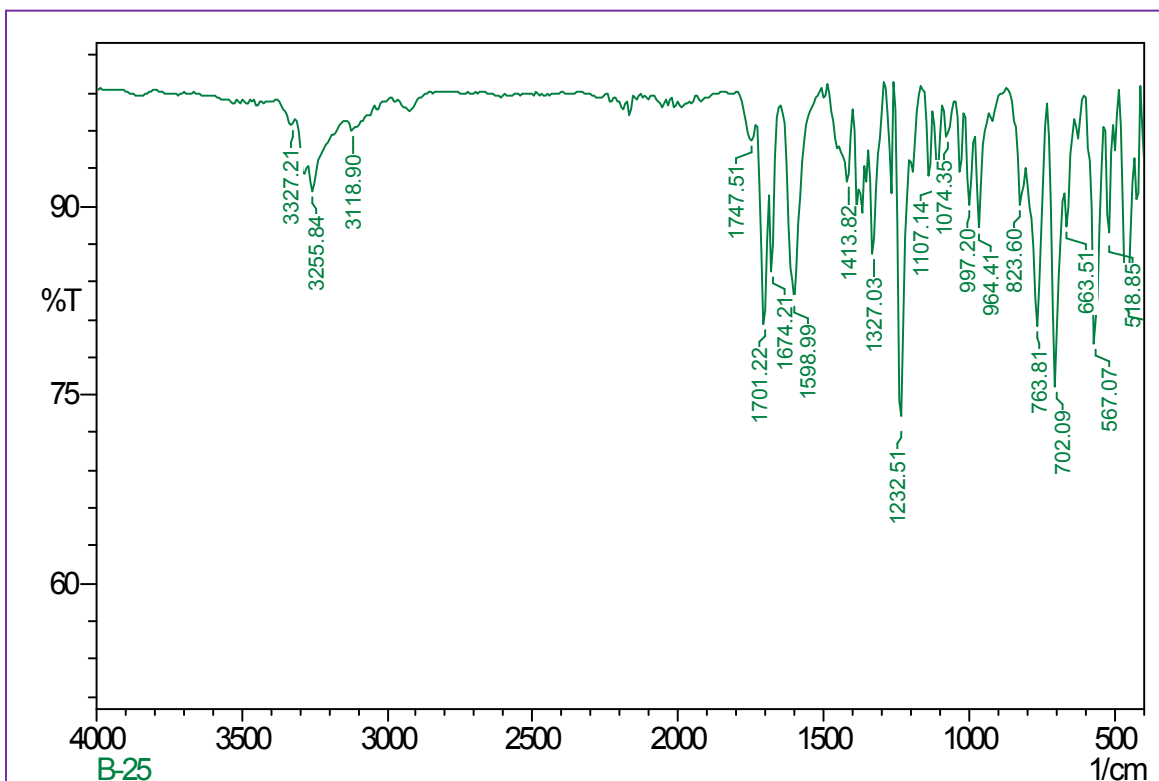


**18) 5-Aceto-6-methyl-4-phenyl-3,4-dihydropyrimidin-2(1H)-one (4r).**

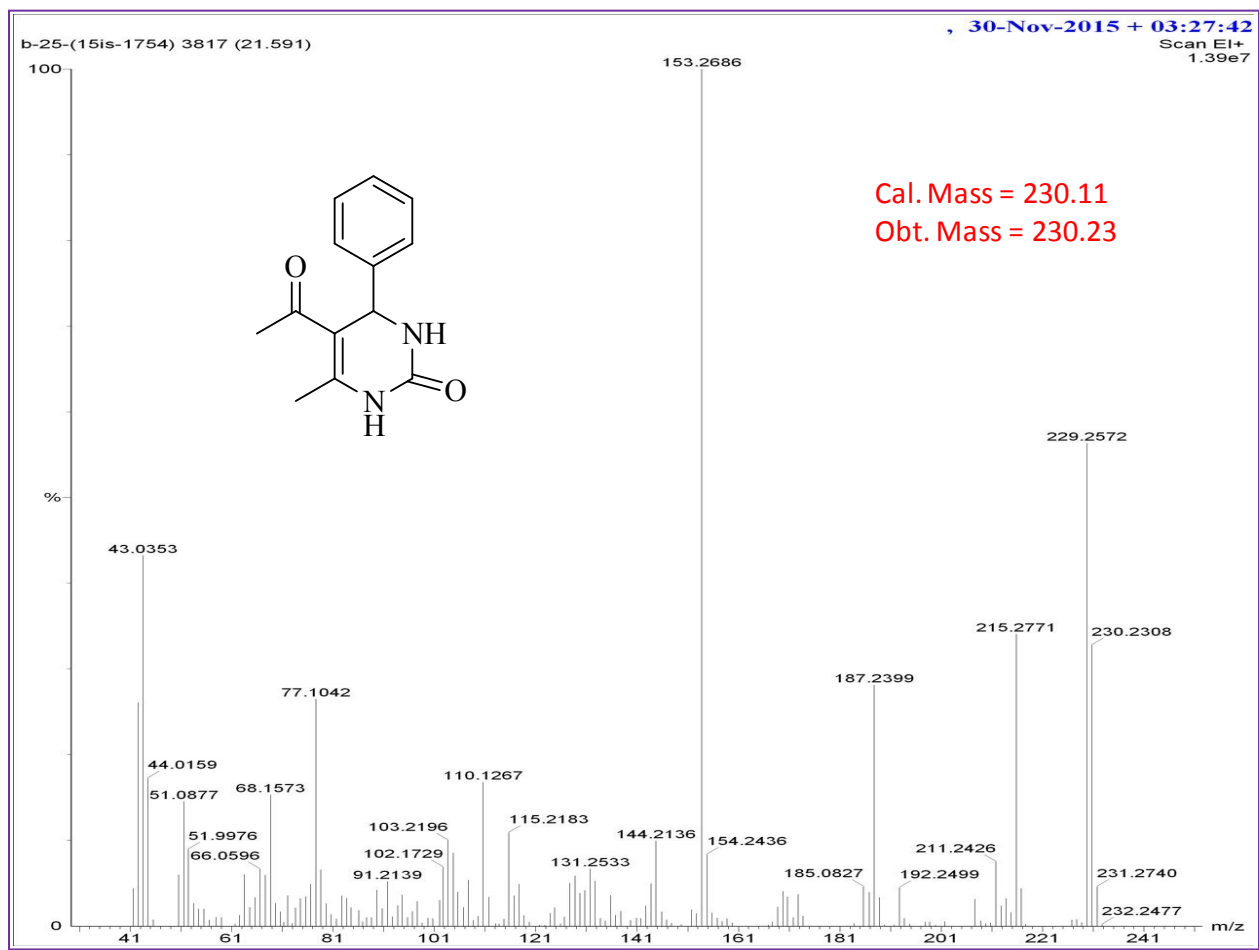




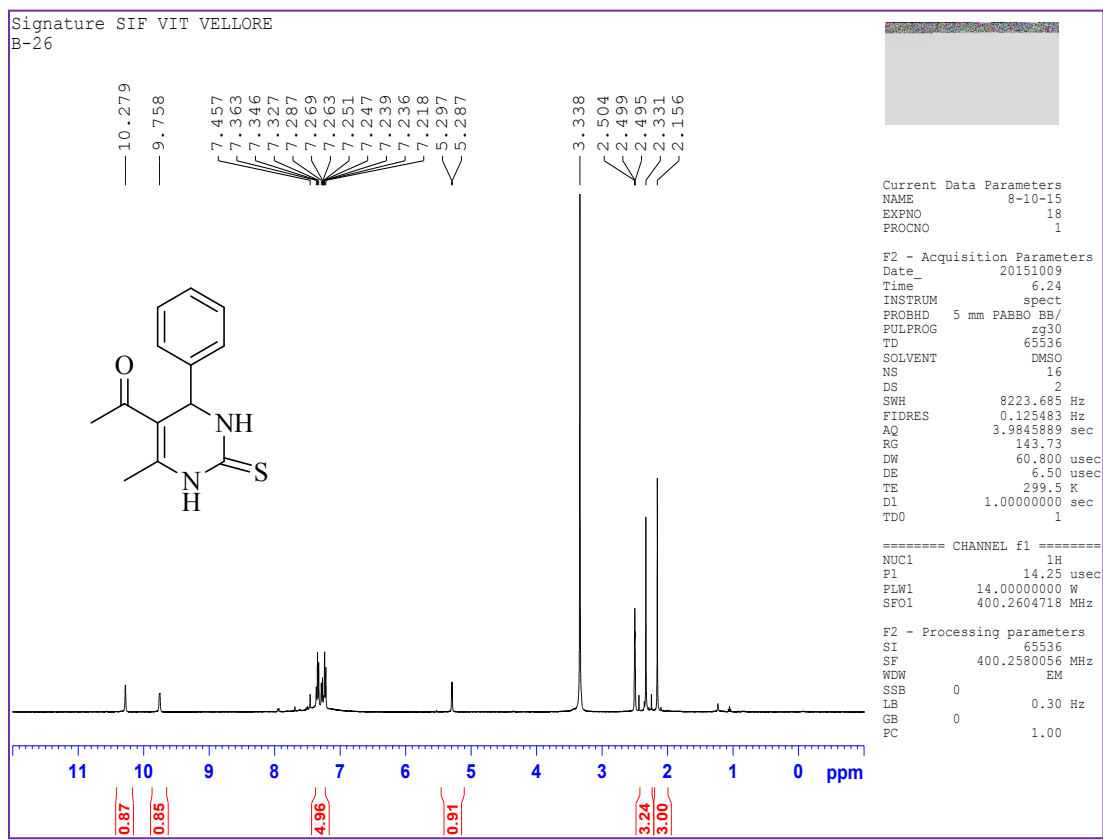
18) 5-Aceto-6-methyl-4-phenyl-3,4-dihydropyrimidin-2(1H)-one (4r).



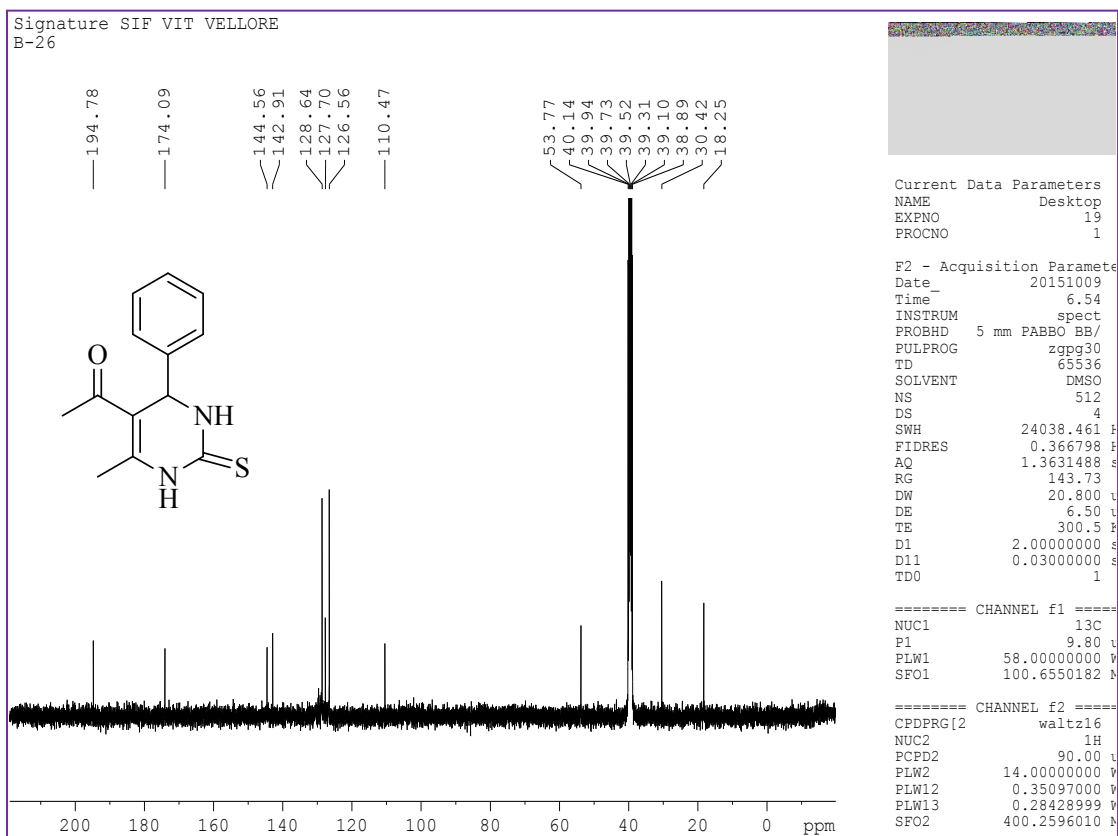
18) 5-Aceto-6-methyl-4-phenyl-3,4-dihydropyrimidin-2(1H)-one (4r).



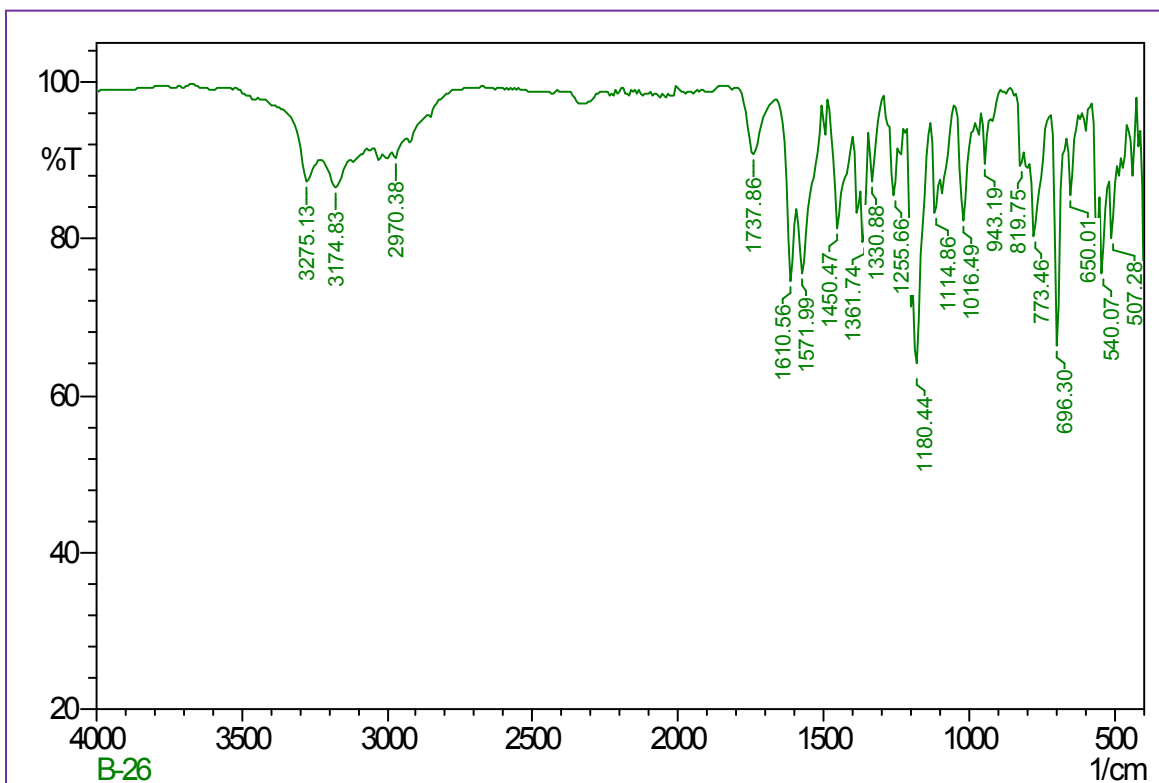
19) 5-Acetyl-6-methyl-4-phenyl-3,4-dihydropyrimidin-2(1H)-thione (4s).



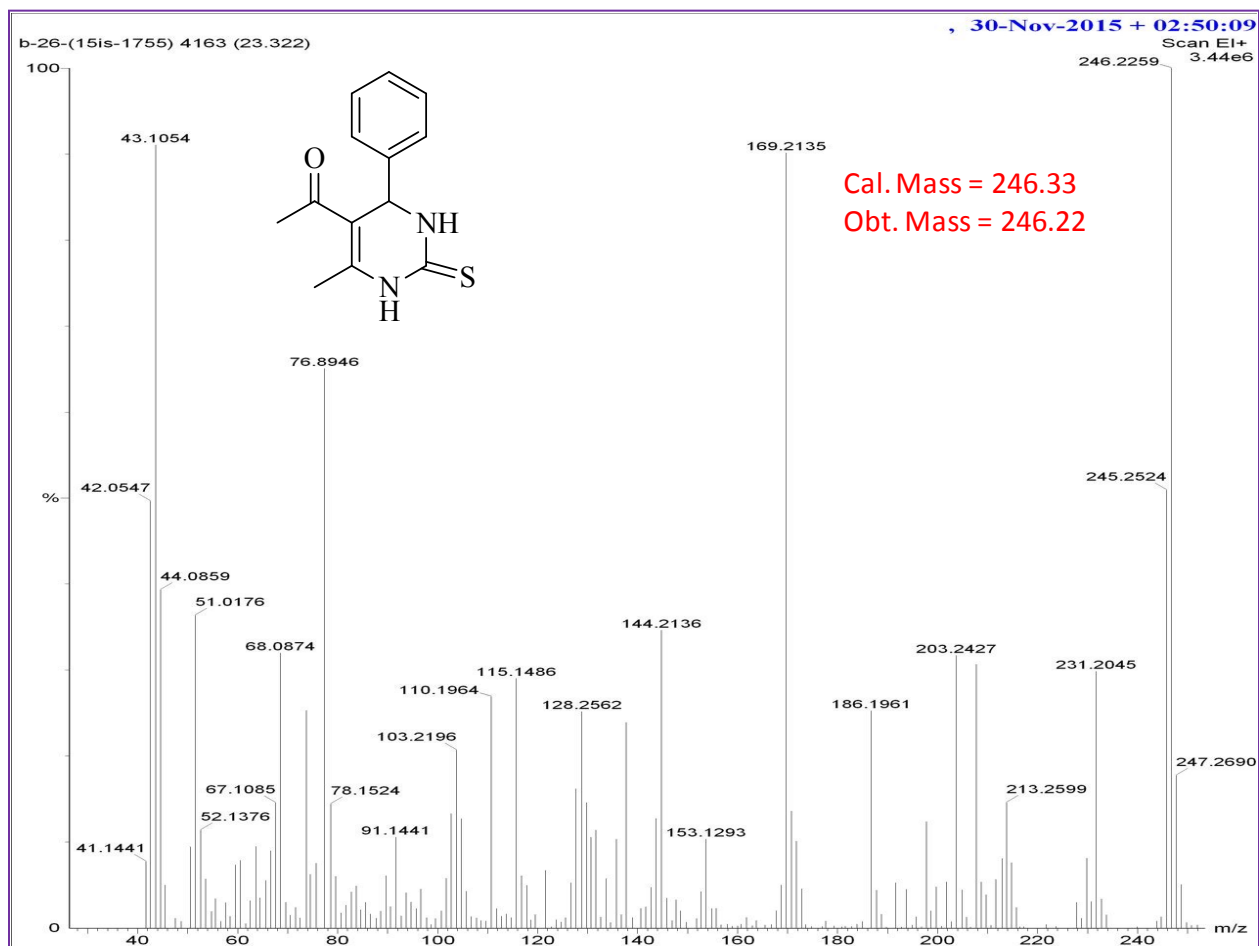
**19) 5-Acetyl-6-methyl-4-phenyl-3,4-dihydropyrimidin-2(1H)-thione (4s).**



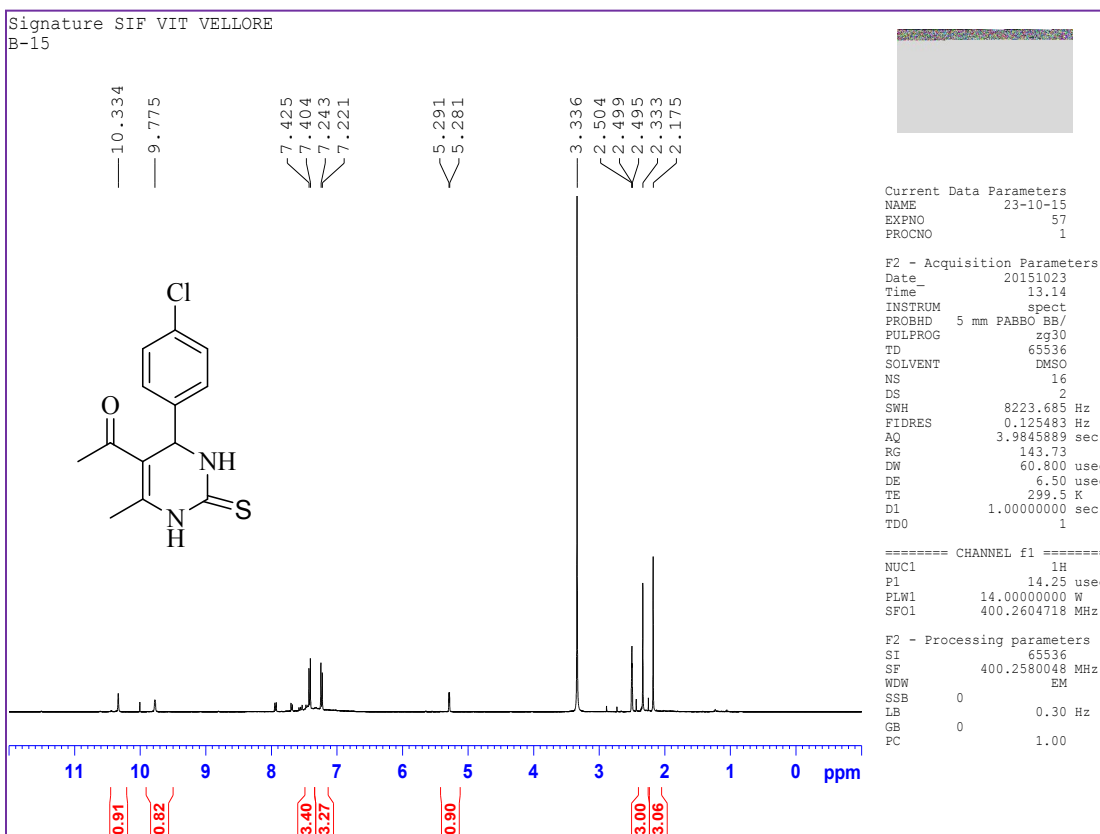
19) 5-Acetyl-6-methyl-4-phenyl-3,4-dihydropyrimidin-2(1H)-thione (4s).



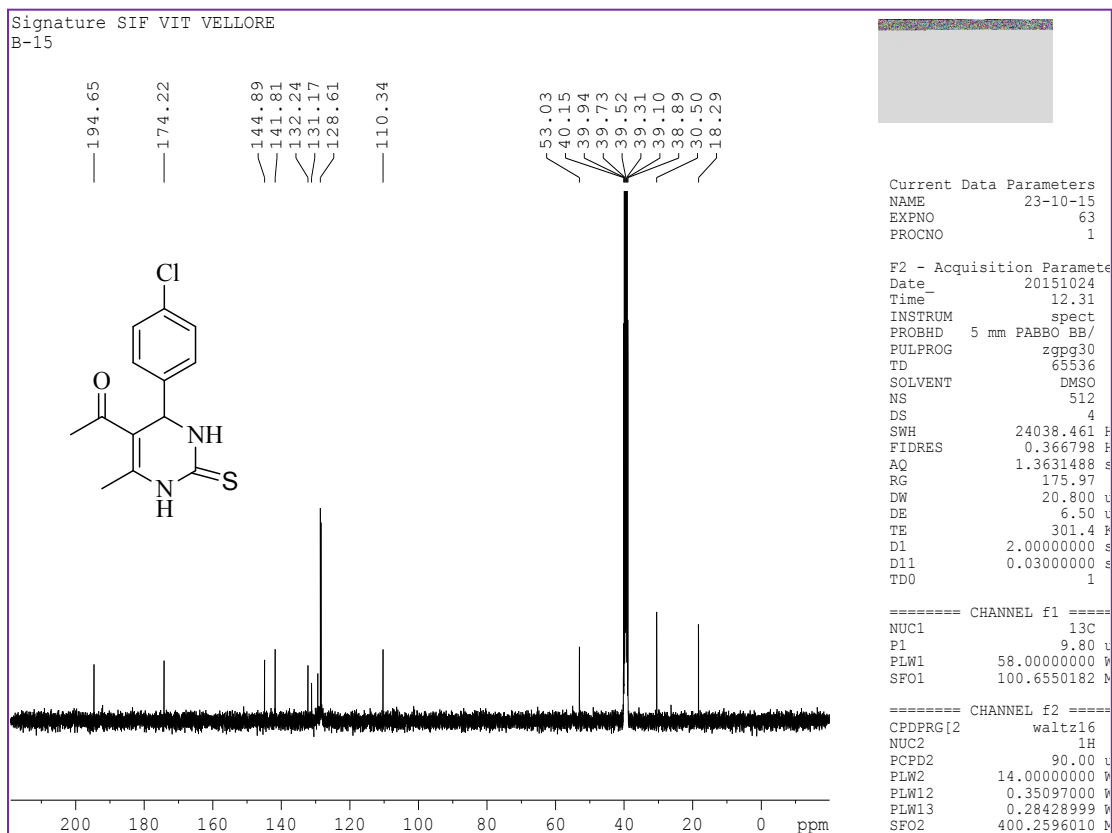
19) 5-Acetyl-6-methyl-4-phenyl-3,4-dihydropyrimidin-2(1H)-thione (4s).



20) 5-Aceto-6-methyl-4-(4-chlorophenyl)-3,4-dihydropyrimidin-2(1H)-thione (4t).

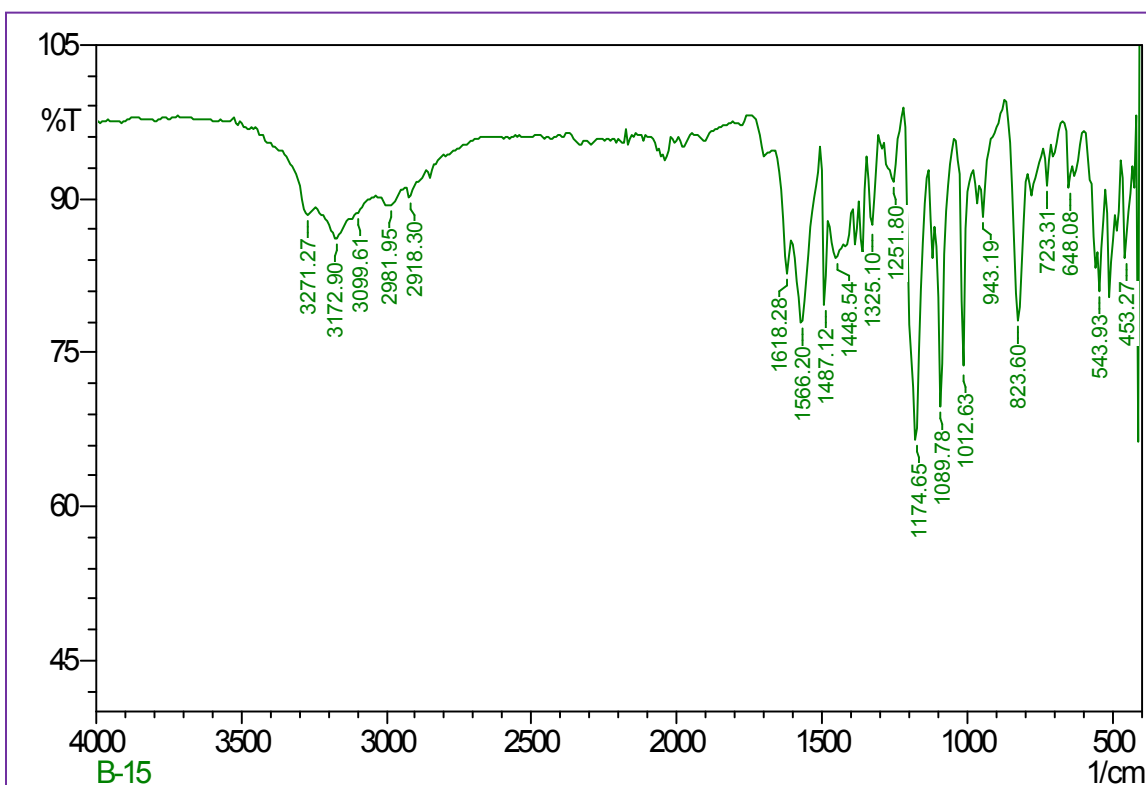


**20) 5-Aceto-6-methyl-4-(4-chlorophenyl)-3,4-dihydropyrimidin-2(1H)-thione (4t).**

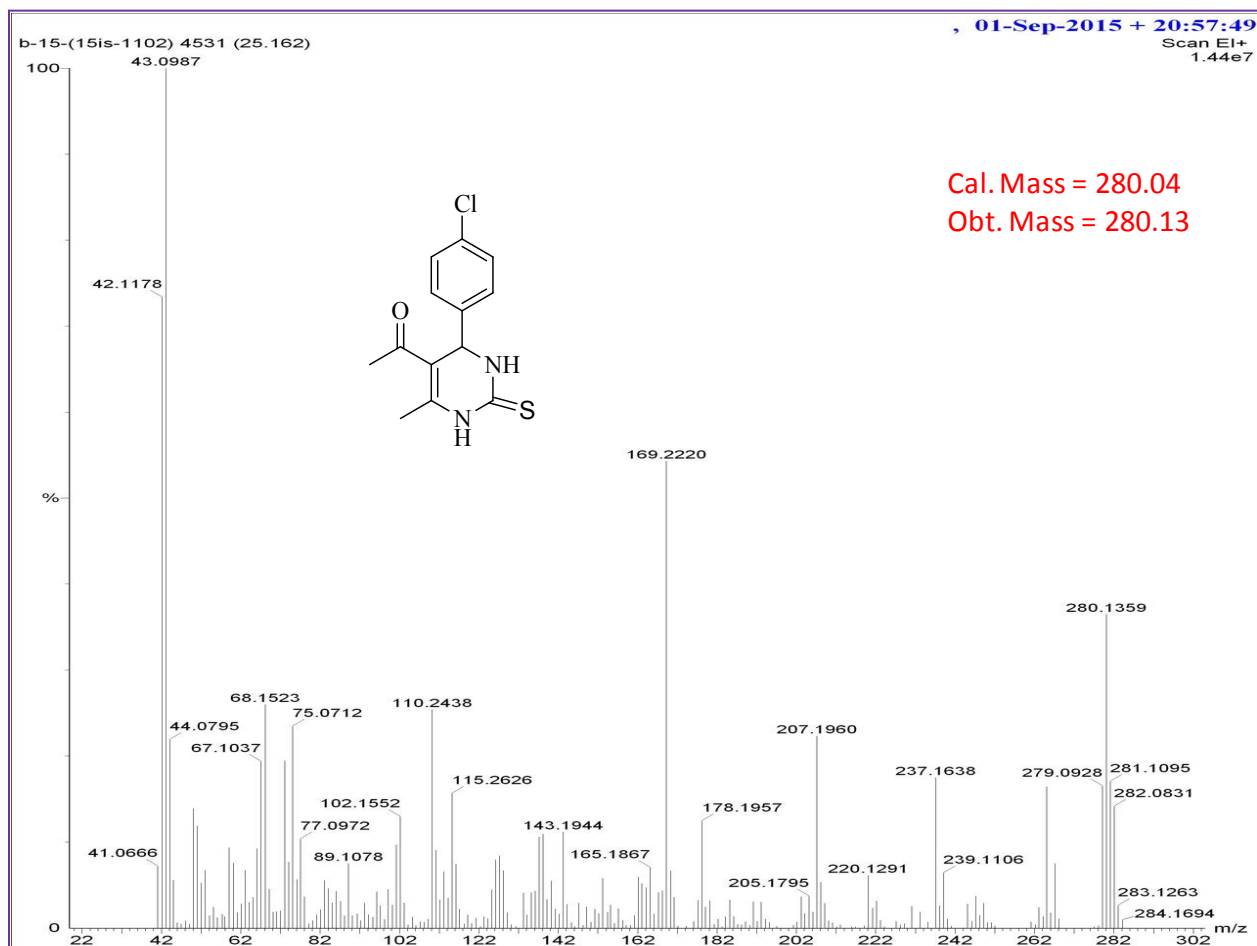




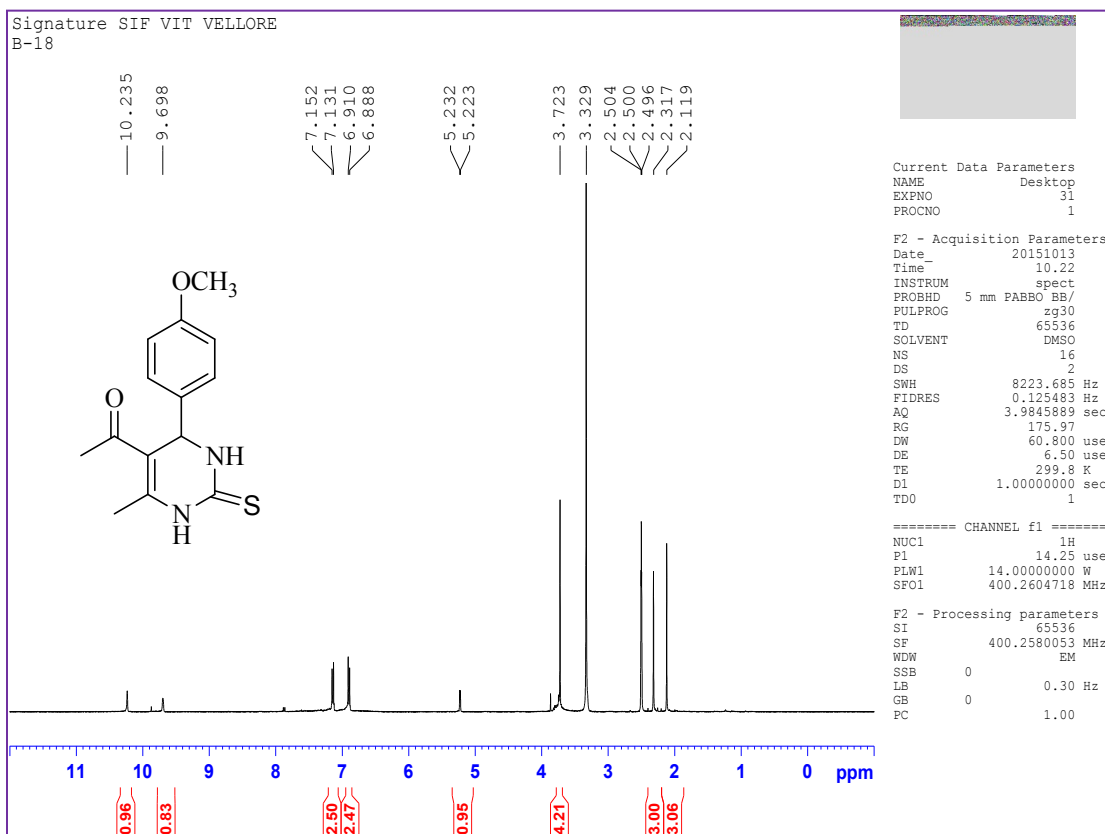
20) 5-Aceto-6-methyl-4-(4-chlorophenyl)-3,4-dihydropyrimidin-2(1H)-thione (4t).



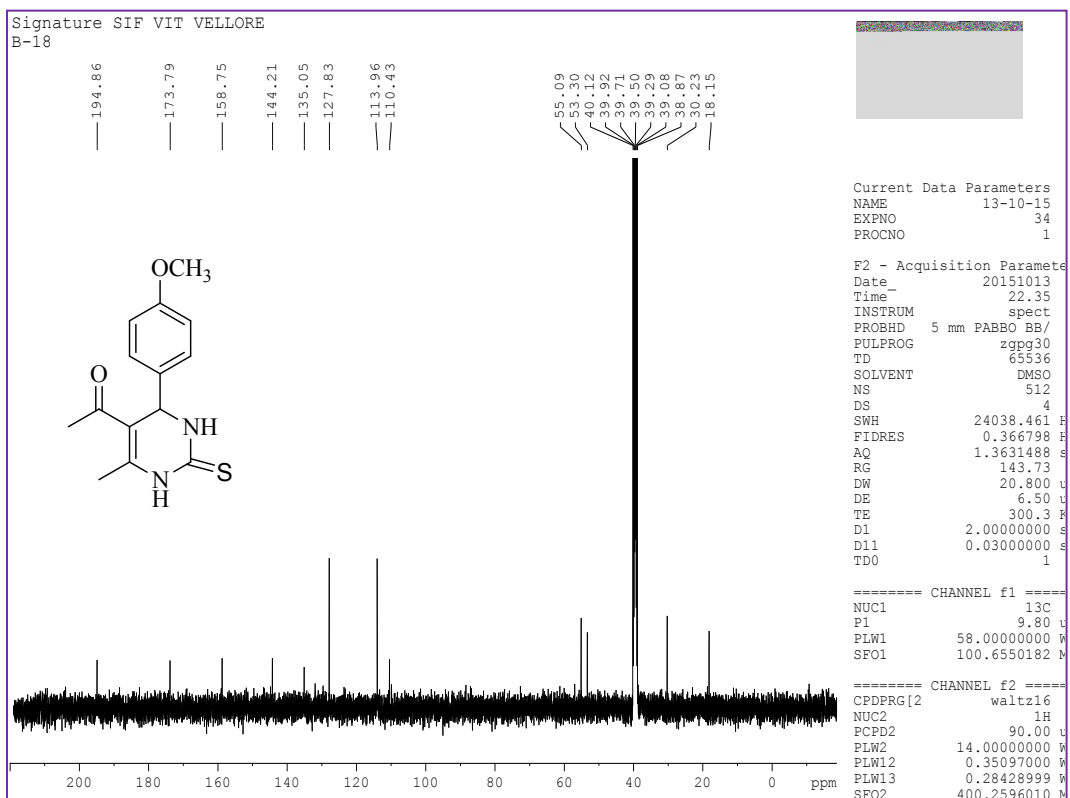
20) 5-Aceto-6-methyl-4-(4-chlorophenyl)-3,4-dihydropyrimidin-2(1H)-thione (4t).



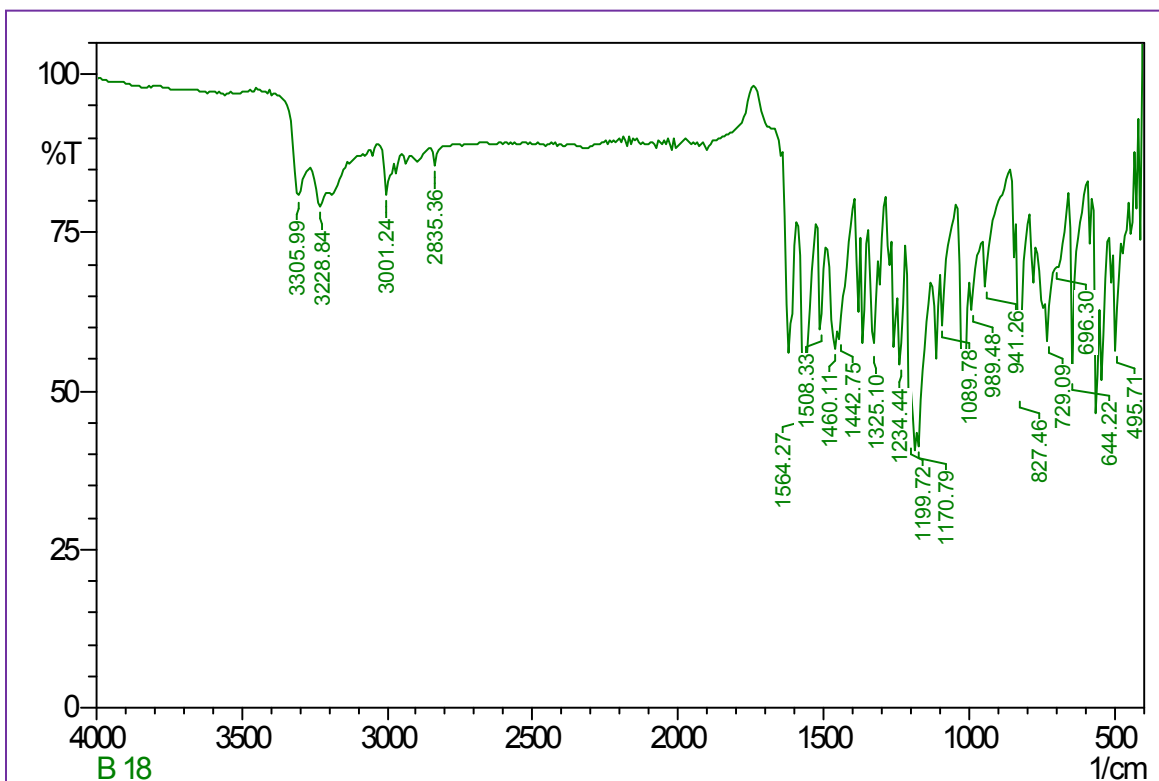
21) 5-Acetyl-6-methyl-4-(4-methoxyphenyl-3,4-dihydropyrimidin-2(1H)-thione (4u).



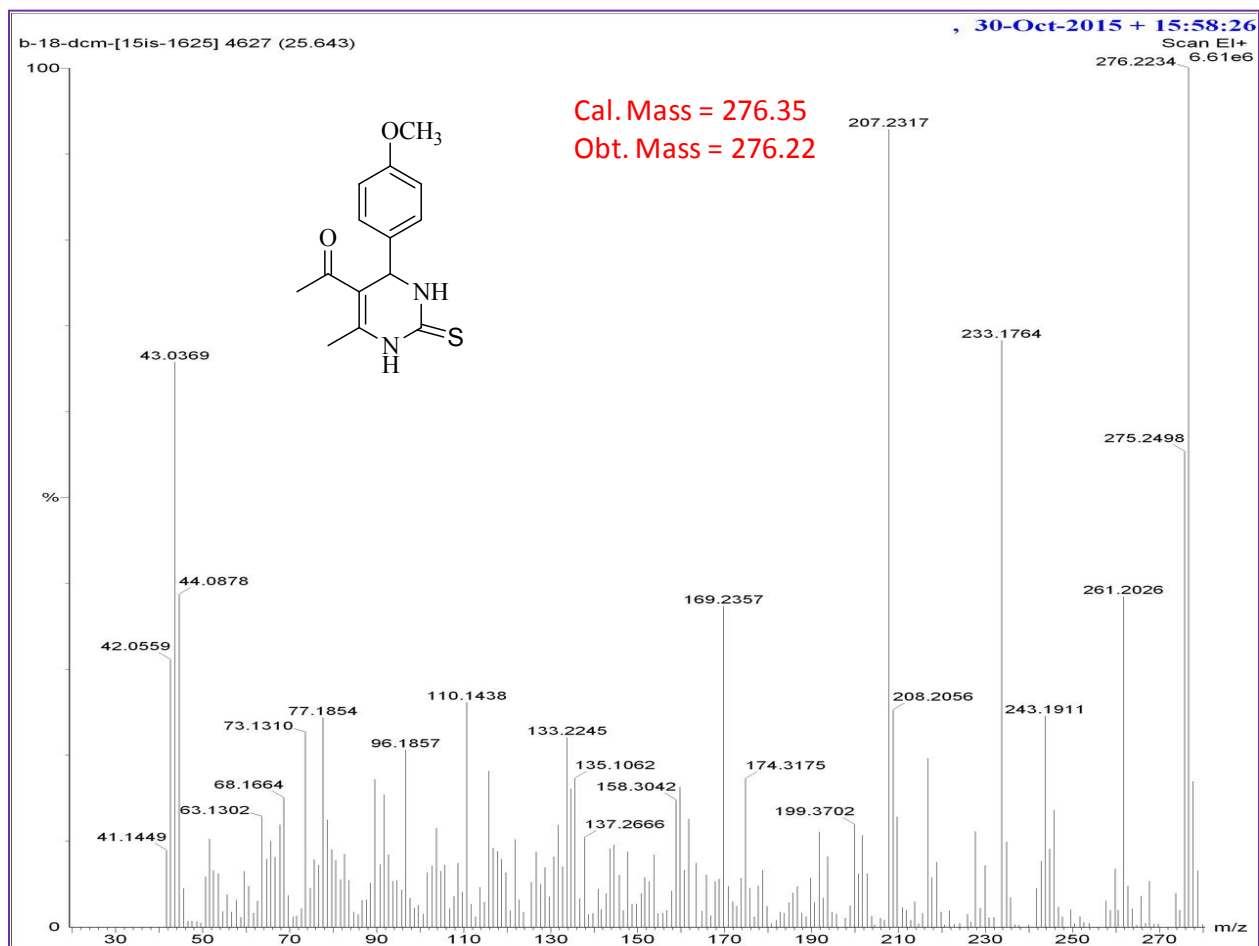
21) 5-Acetyl-6-methyl-4-(4-methoxyphenyl)-3,4-dihydropyrimidin-2(1H)-thione (4u).



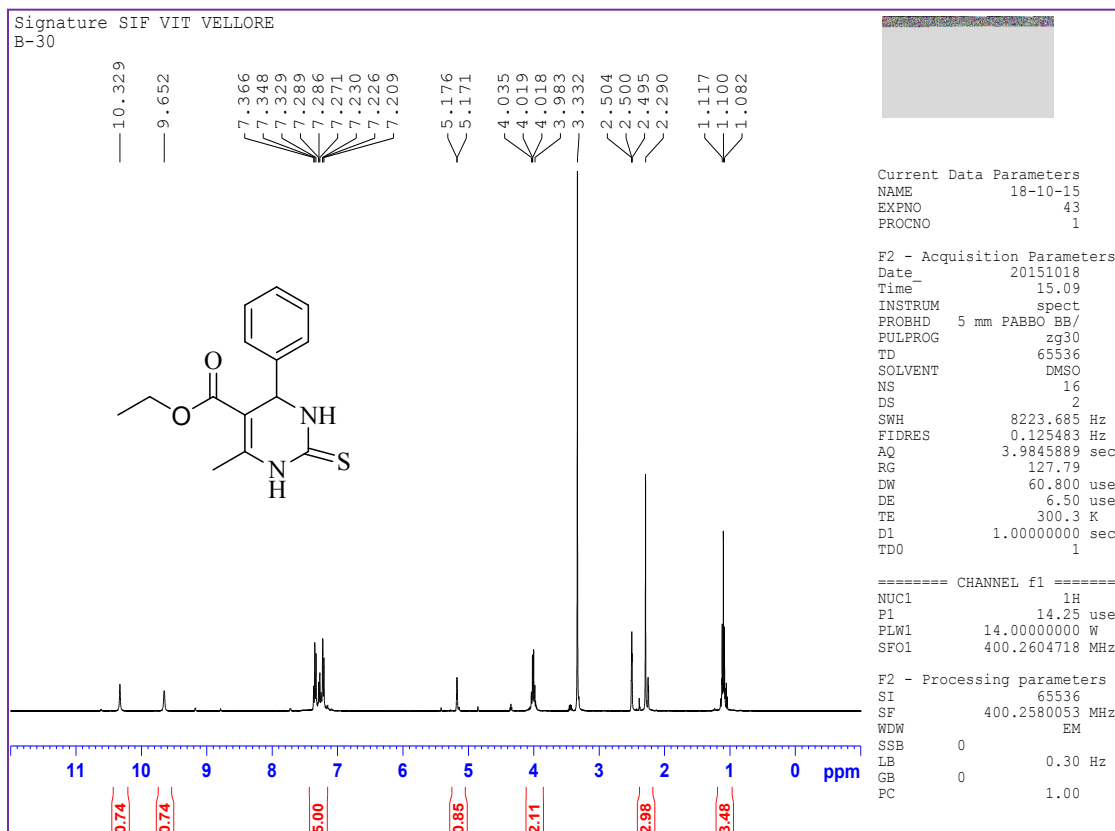
21) 5-Acetyl-6-methyl-4-(4-methoxyphenyl-3,4-dihydropyrimidin-2(1H)-thione (4u).



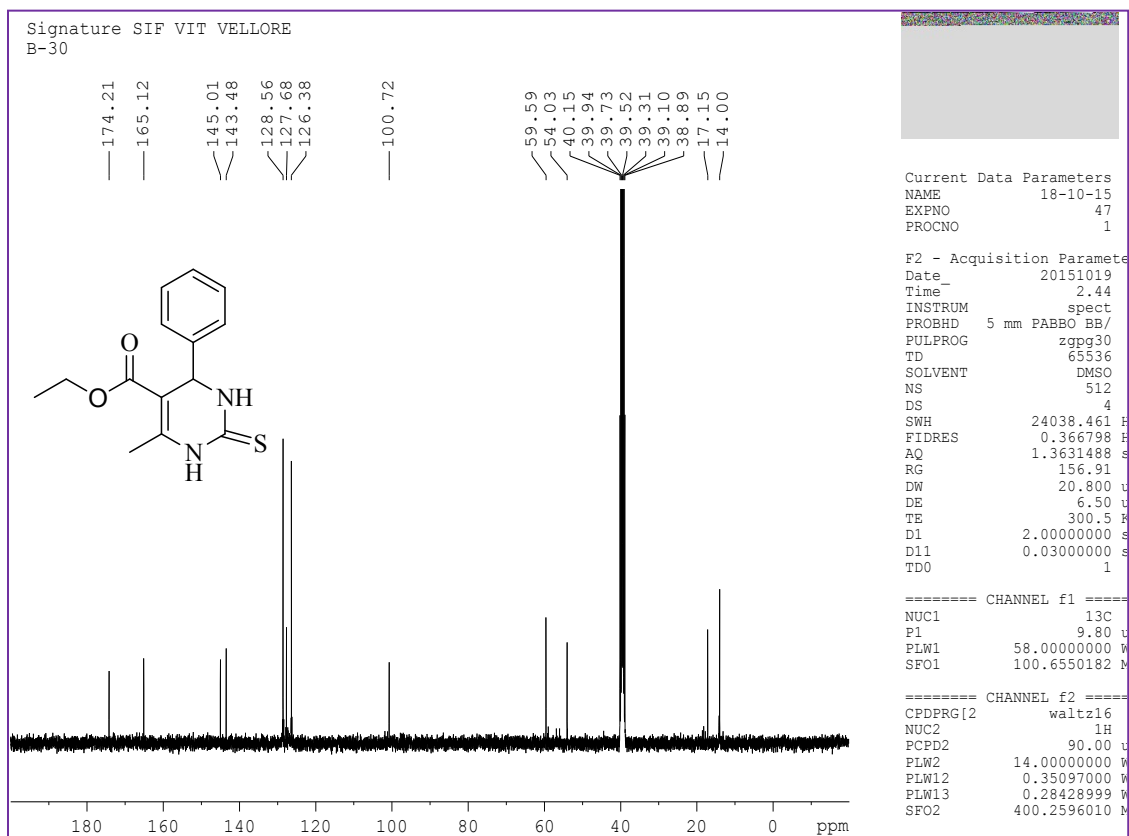
21) 5-Acetyl-6-methyl-4-(4-methoxyphenyl)-3,4-dihydropyrimidin-2(1H)-thione (4u).



22) 5-Ethoxycarbonyl-4-phenyl-6-methyl-3,4-dihydropyrimidin-2(1H)-thione (4v).

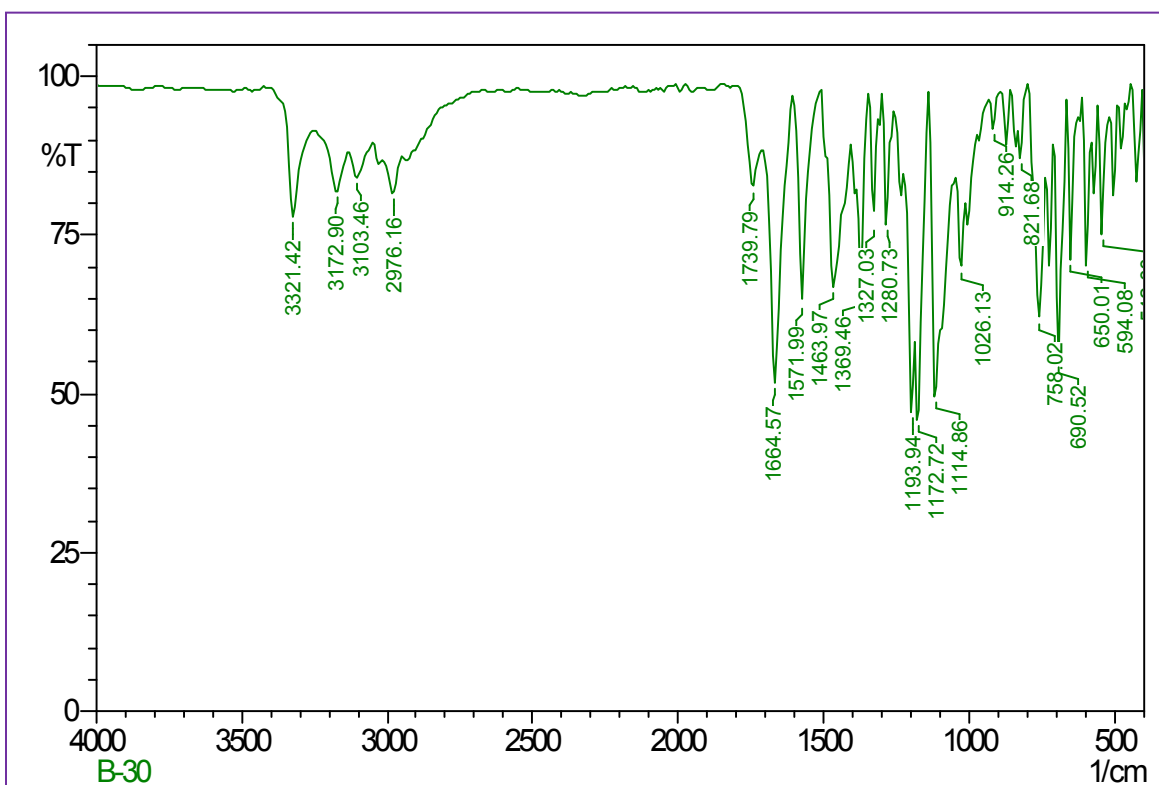


22) 5-Ethoxycarbonyl-4-phenyl-6-methyl-3,4-dihydropyrimidin-2(1H)-thione (4v).

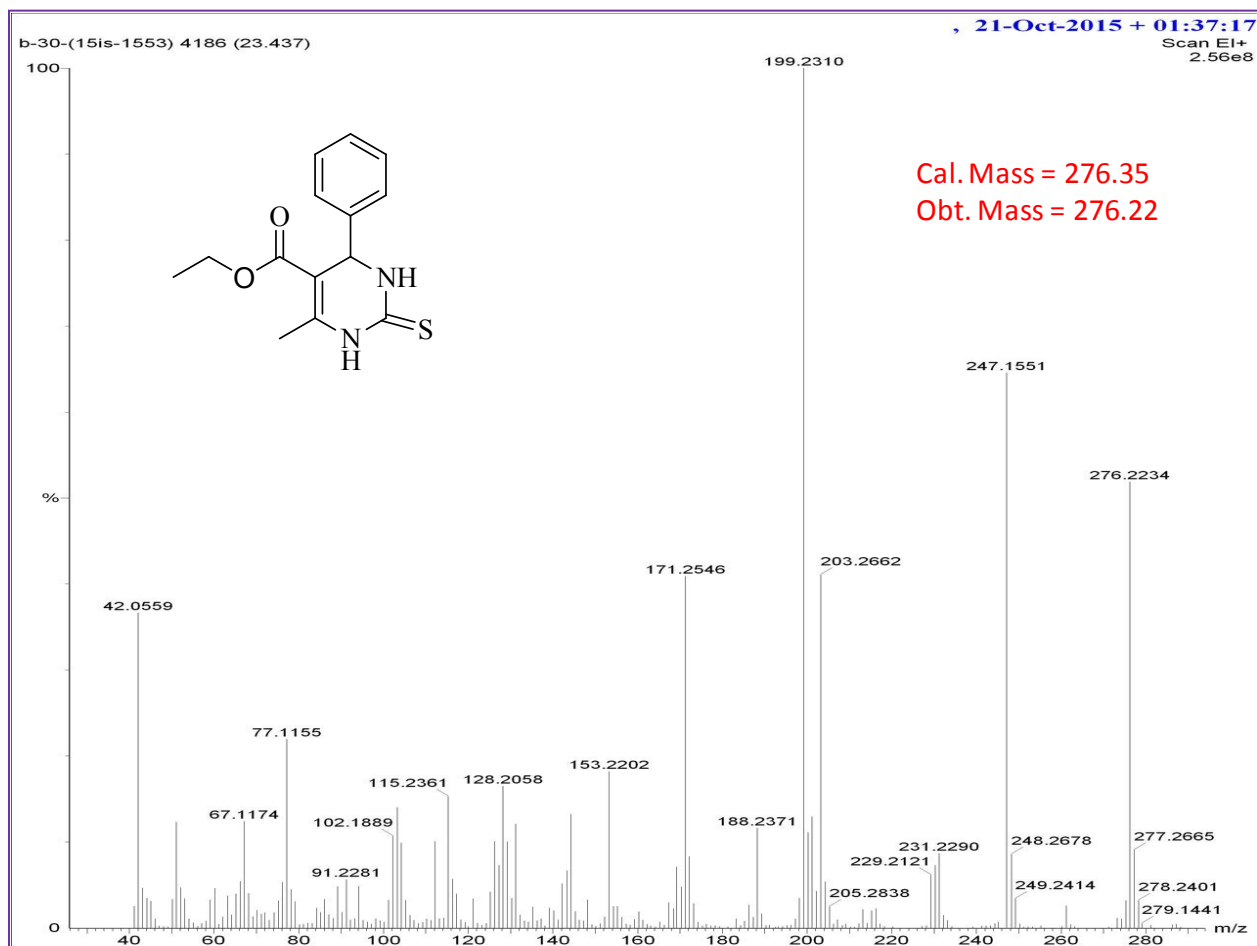




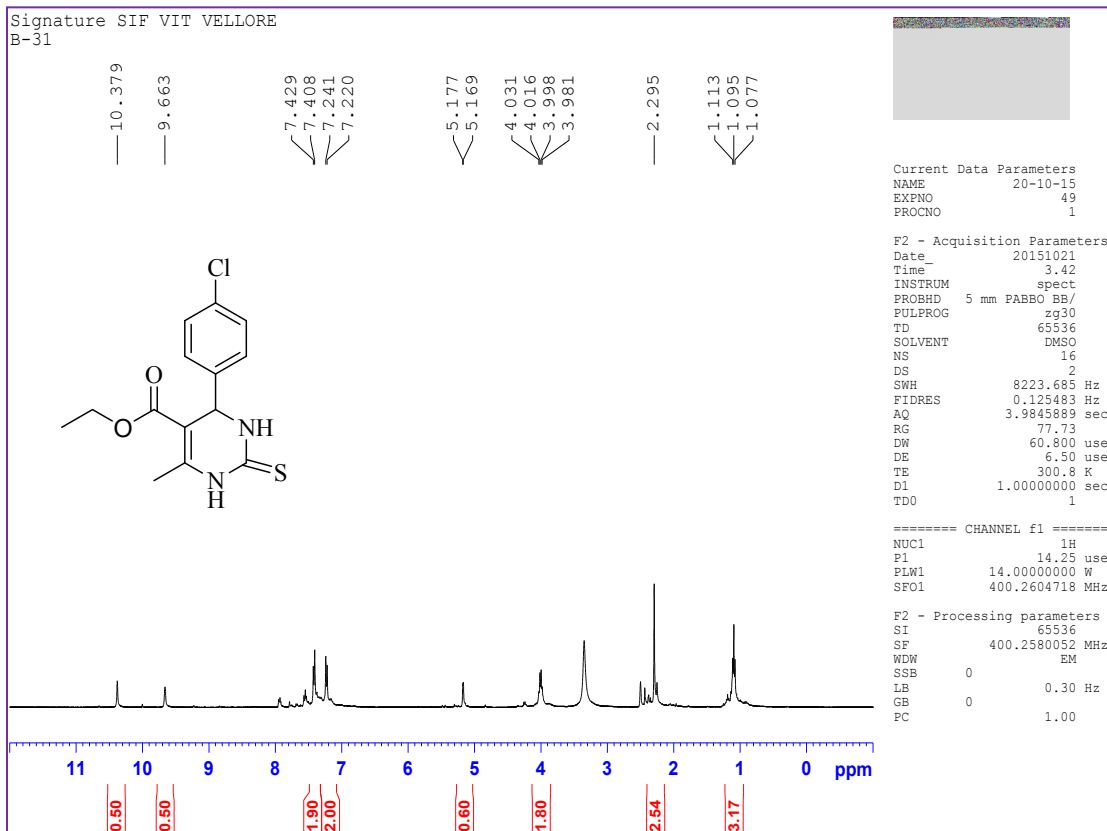
22) 5-Ethoxycarbonyl-4-phenyl-6-methyl-3,4-dihydropyrimidin-2(1H)-thione (4v).



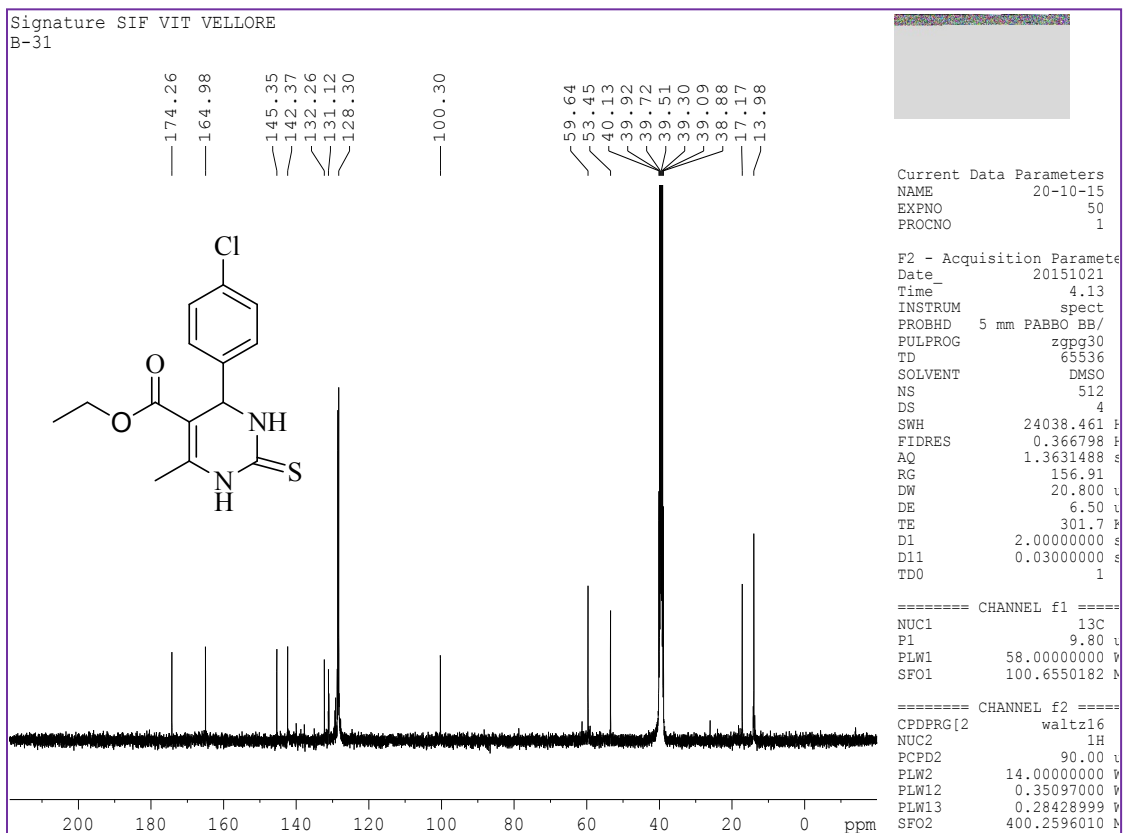
22) 5-Ethoxycarbonyl-4-phenyl-6-methyl-3,4-dihydropyrimidin-2(1H)-thione (4v).



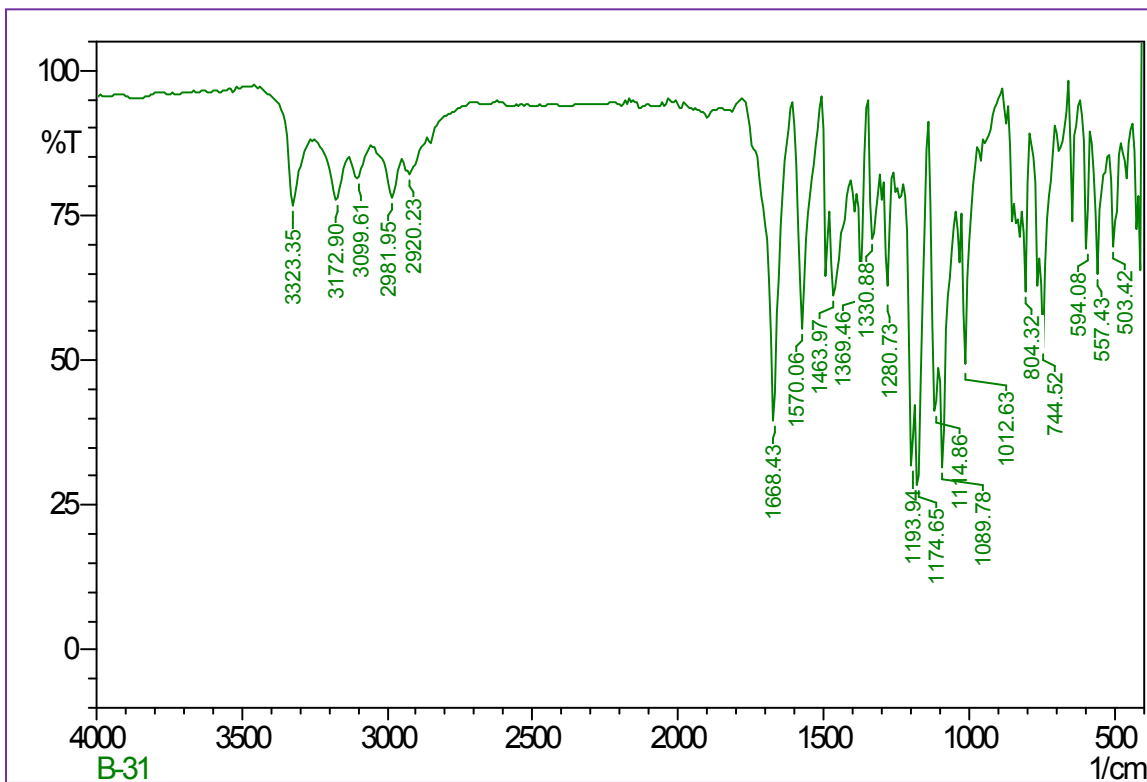
**23) 5-Ethoxycarbonyl-4(4-chlorophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-thione (4w).**



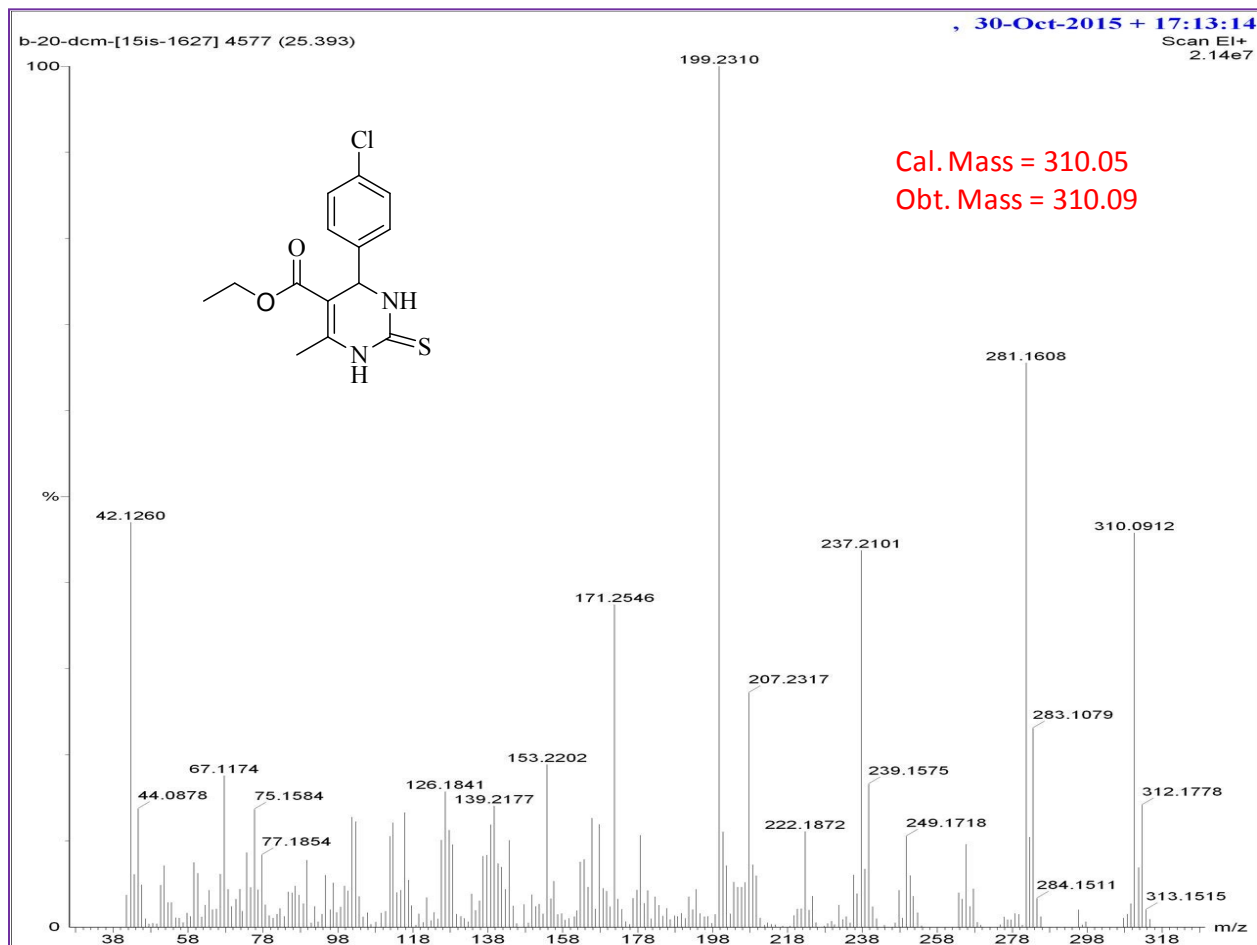
**23) 5-Ethoxycarbonyl-4(4-chlorophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-thione (4w).**



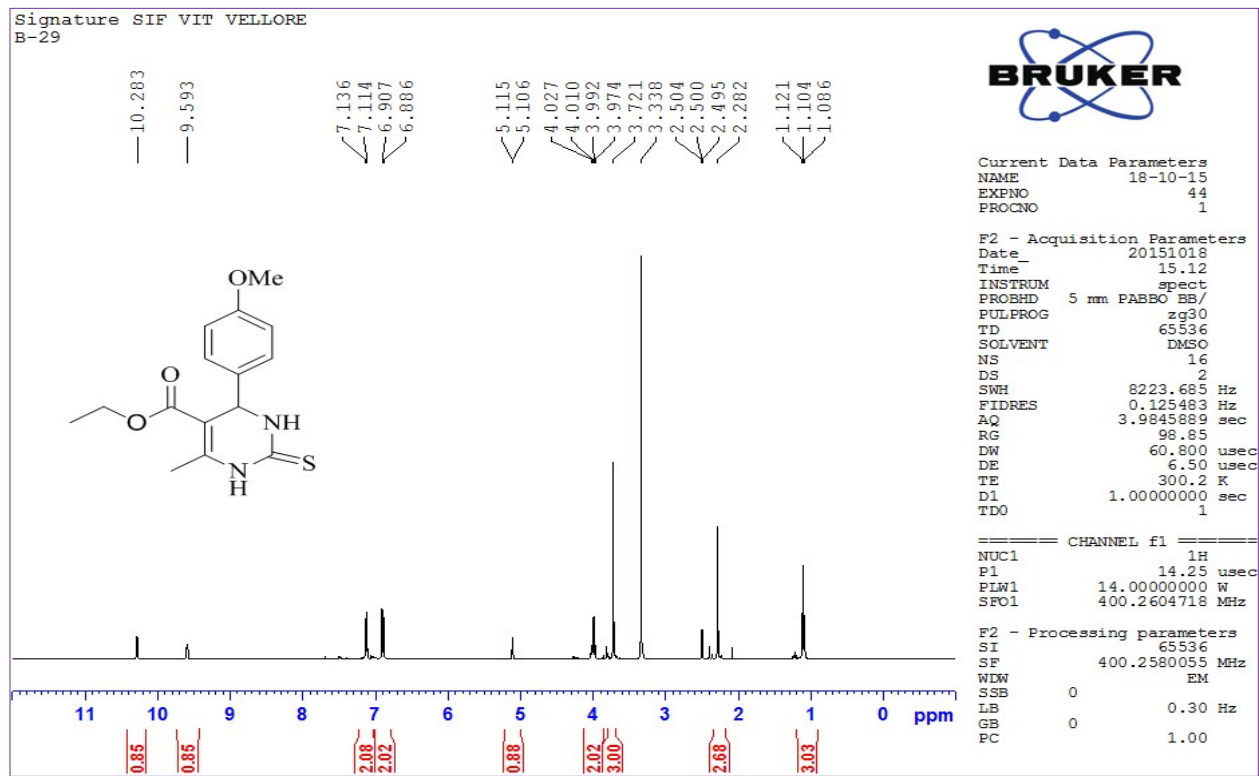
23) 5-Ethoxycarbonyl-4(4-chlorophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-thione (4w).



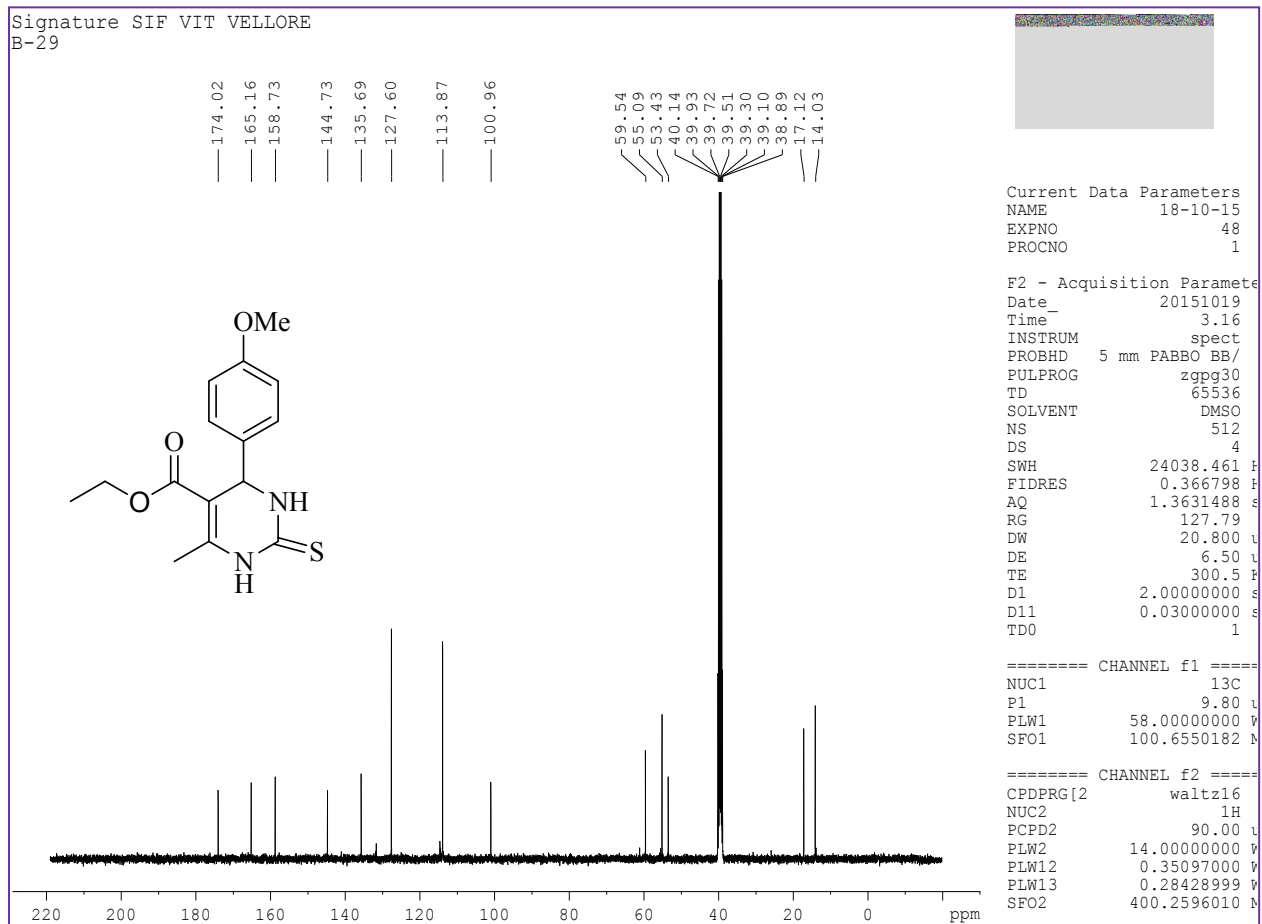
23) 5-Ethoxycarbonyl-4(4-chlorophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-thione (4w).



24) 5-Ethoxycarbonyl-4-(4-methoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-thione (4x).

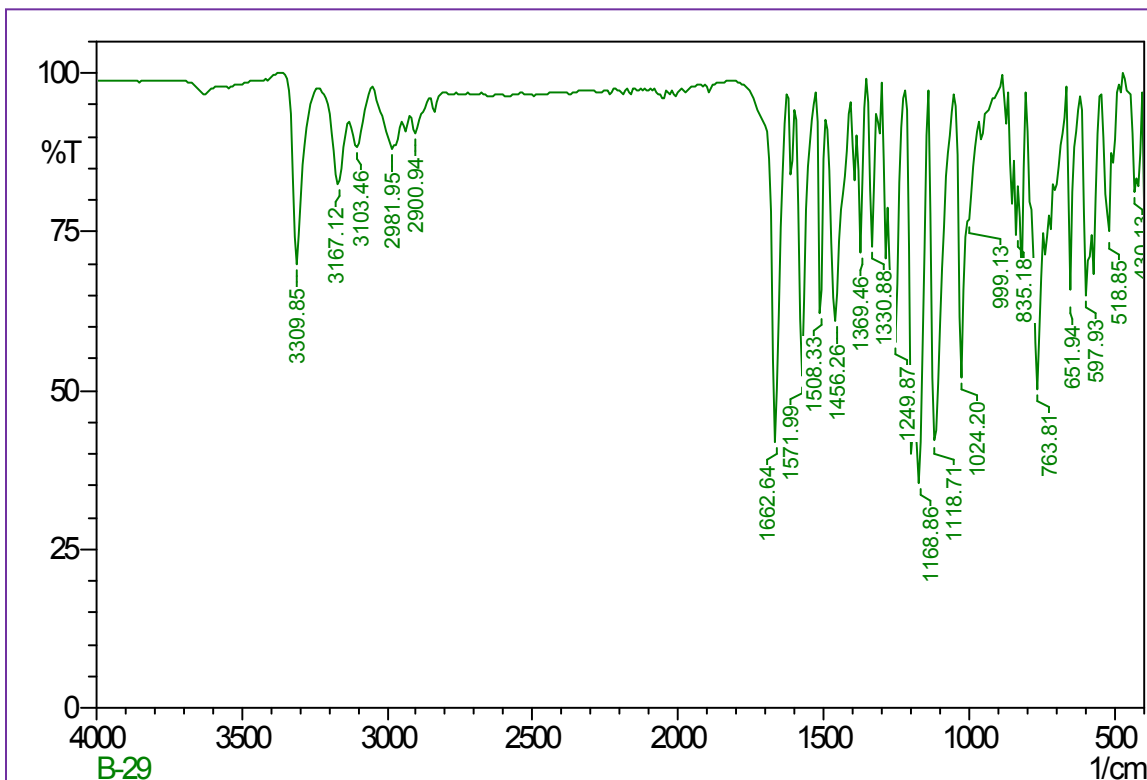


**24) 5-Ethoxycarbonyl-4-(4-methoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-thione (4x).**

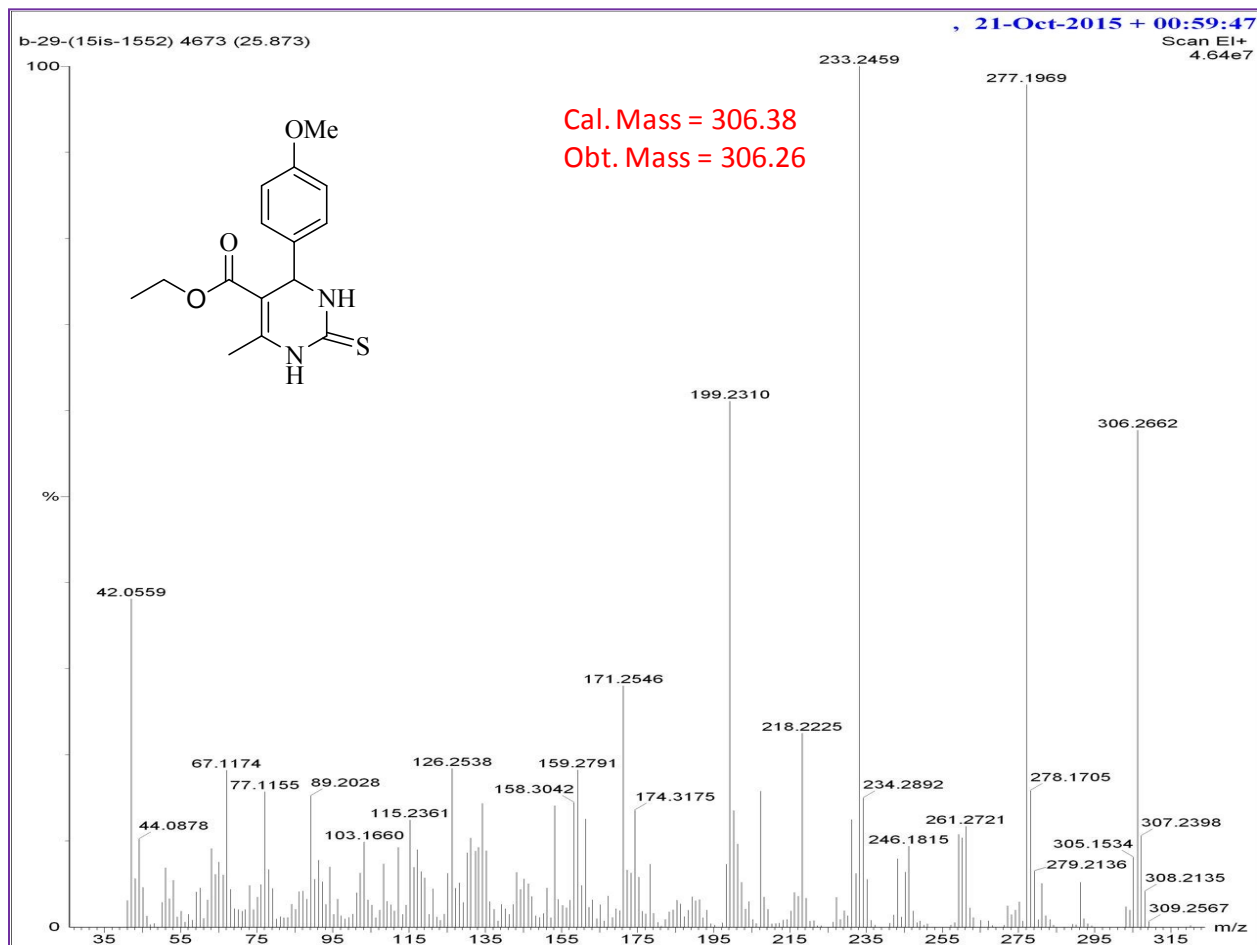




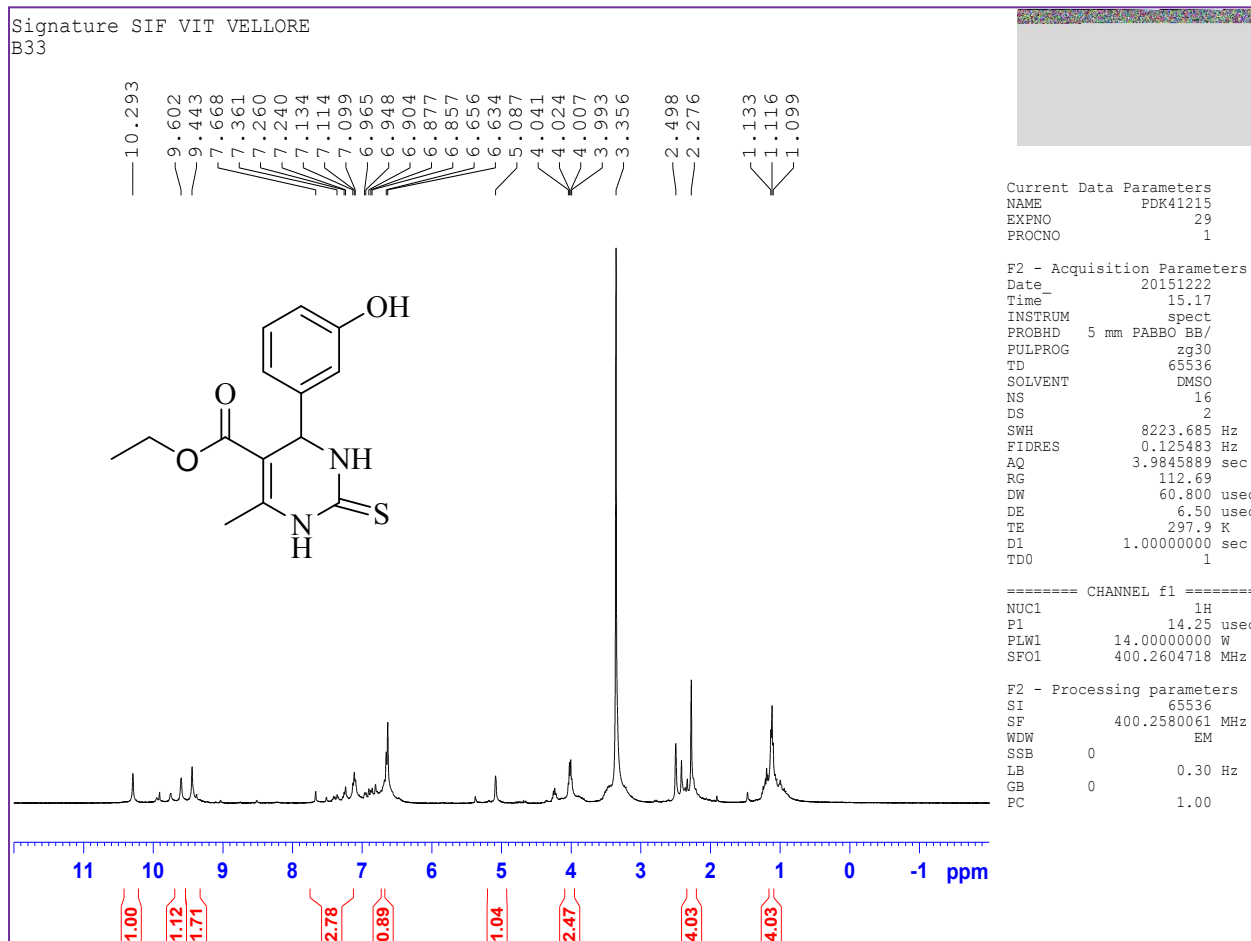
24) 5-Ethoxycarbonyl-4-(4-methoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1*H*)-thione (4x).



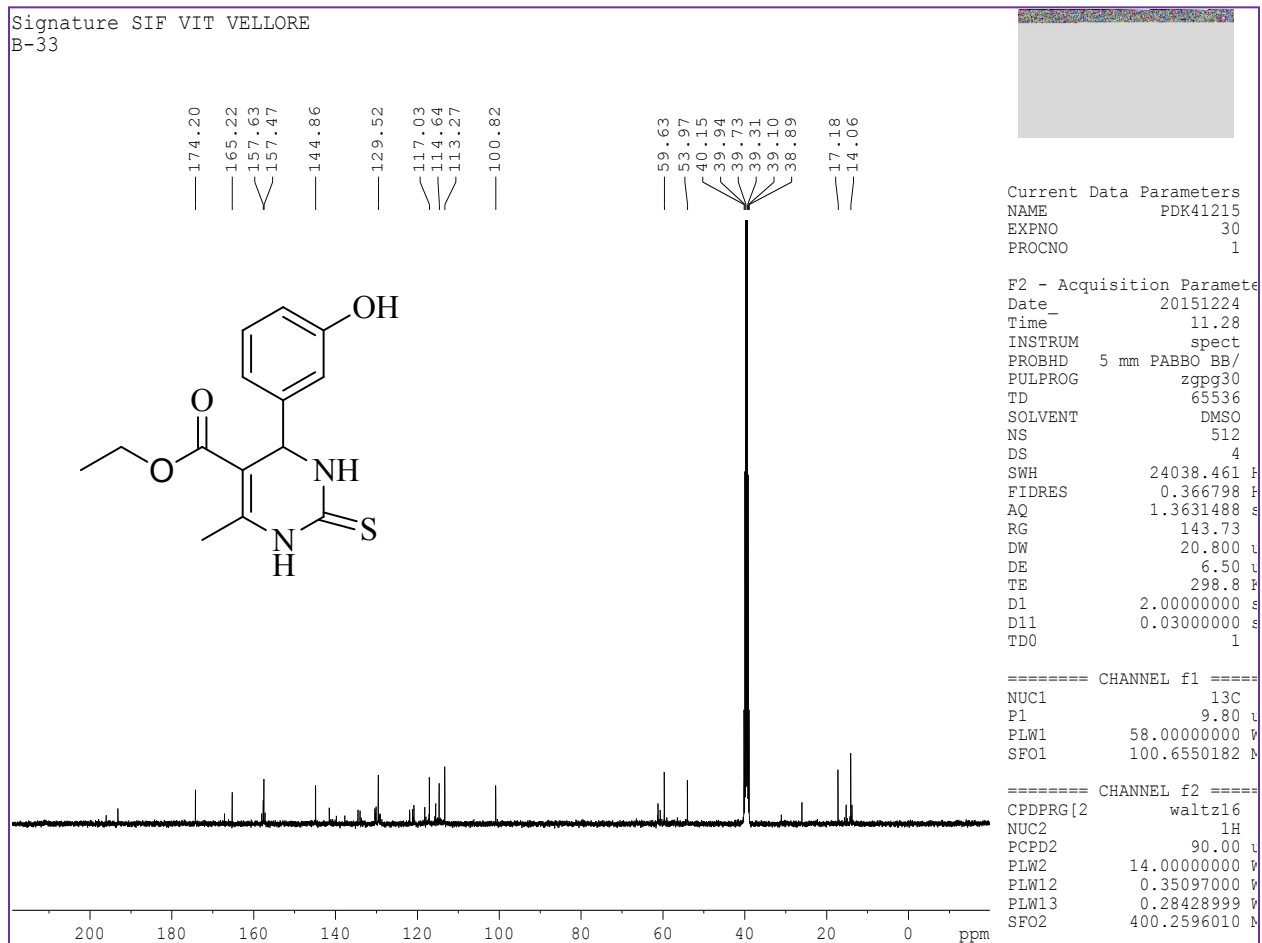
24) 5-Ethoxycarbonyl-4-(4-methoxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-thione (4x).



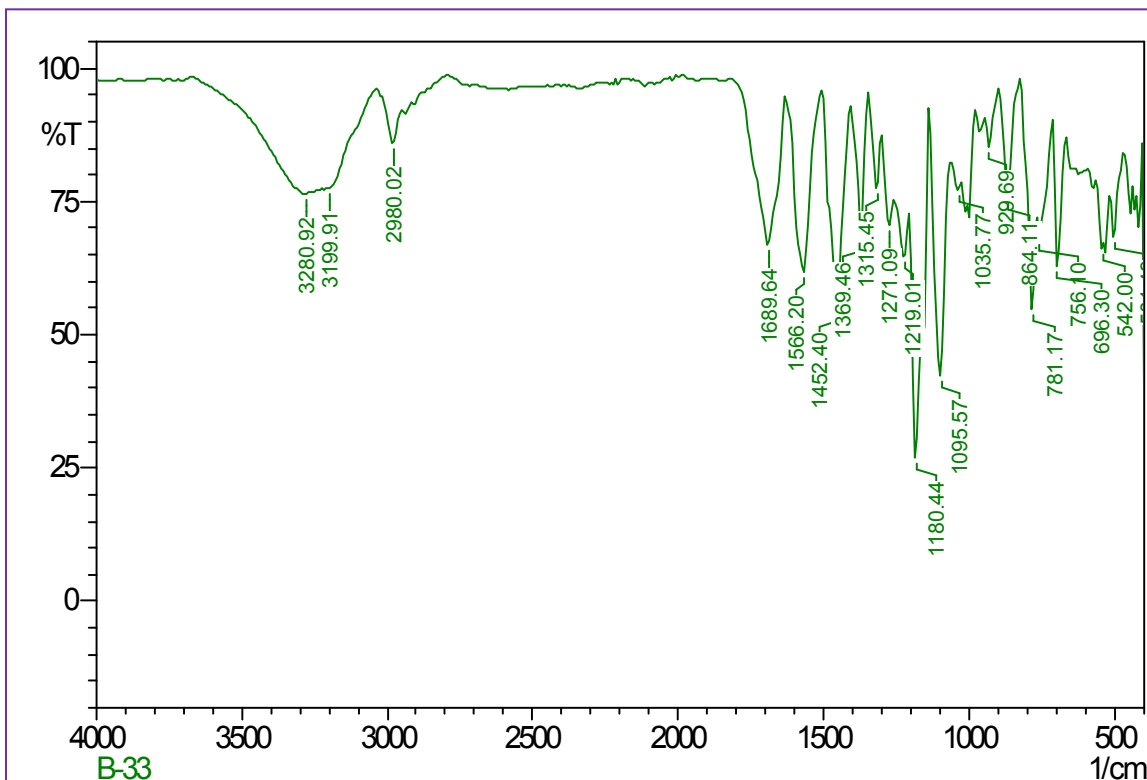
**5-Ethoxycarbonyl-4-(3-hydroxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-thione (Monastrol).**



**5-Ethoxycarbonyl-4-(3-hydroxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-thione  
(Monastrol).**



**5-Ethoxycarbonyl-4-(3-hydroxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-thione (Monastrol).**



**5-Ethoxycarbonyl-4-(3-hydroxyphenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-thione (Monastrol).**

