

Synthesis of 6-(2-Furyl) and 6-(2-Thienyl)-4-trifluoromethylpyrimidinones and -pyrimidines from 4-(2-Heteroaryl)-4-methoxy-1,1,1-trifluoro-3-buten-2-ones

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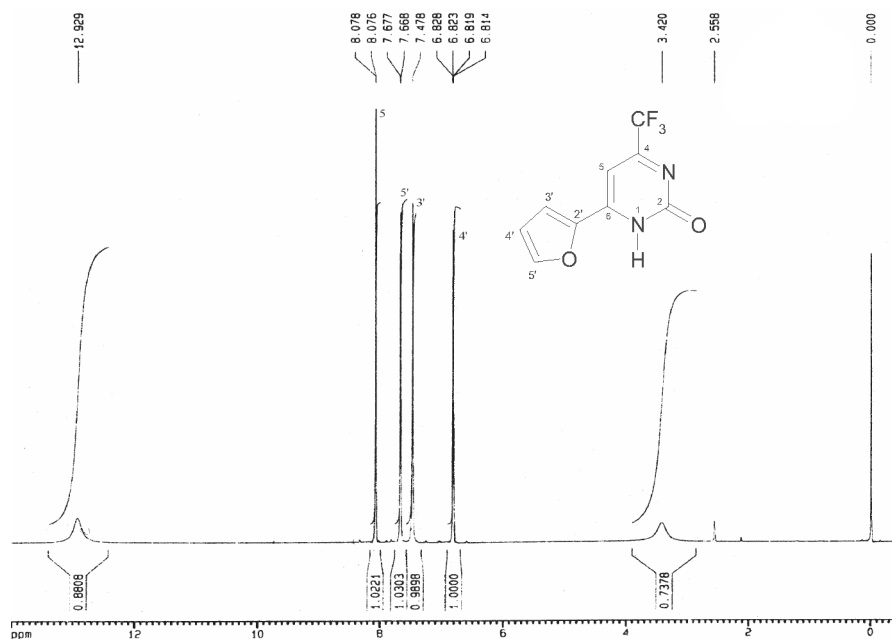


Figure S1. ¹H NMR spectrum of the 6-(2-furyl)-4-trifluoromethyl-1H-pyrimidin-2-one (2a), DMSO-d₆.

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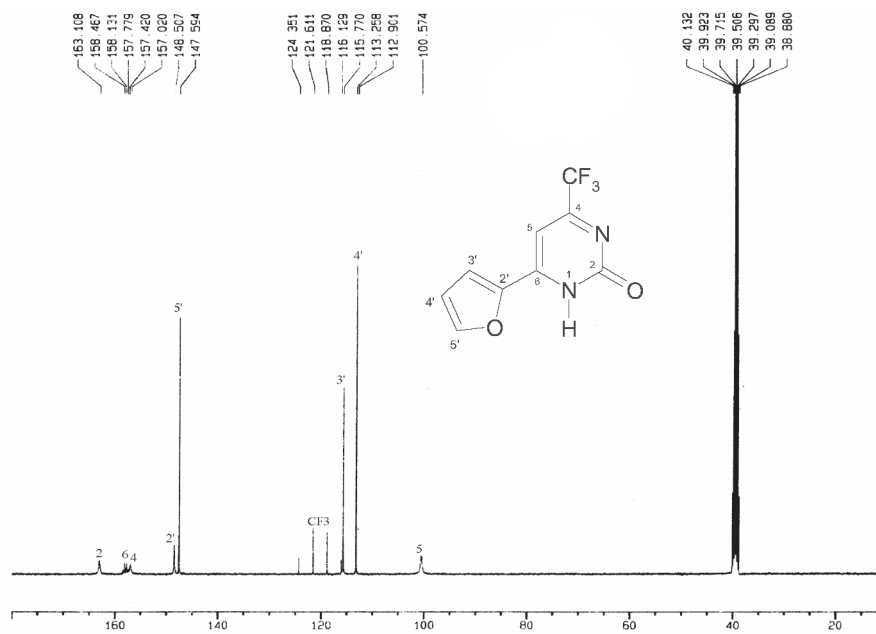


Figure S2. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of the 6-(2-furyl)-4-trifluoromethyl-1*H*-pyrimidin-2-one (**2a**), $\text{DMSO-}d_6$.

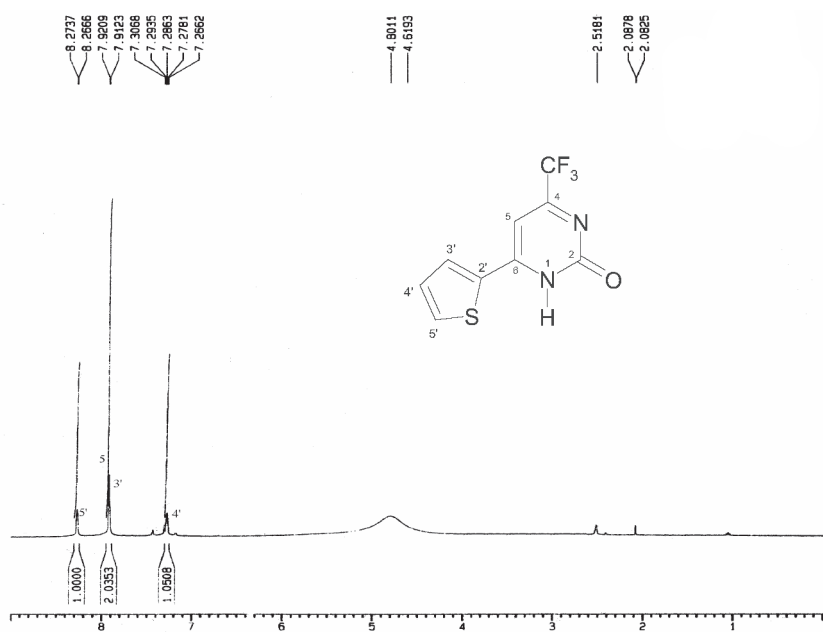


Figure S3. ^1H NMR spectrum of the 6-(2-thienyl)-4-trifluoromethyl-1*H*-pyrimidin-2-one (**2b**), $\text{DMSO-}d_6$.

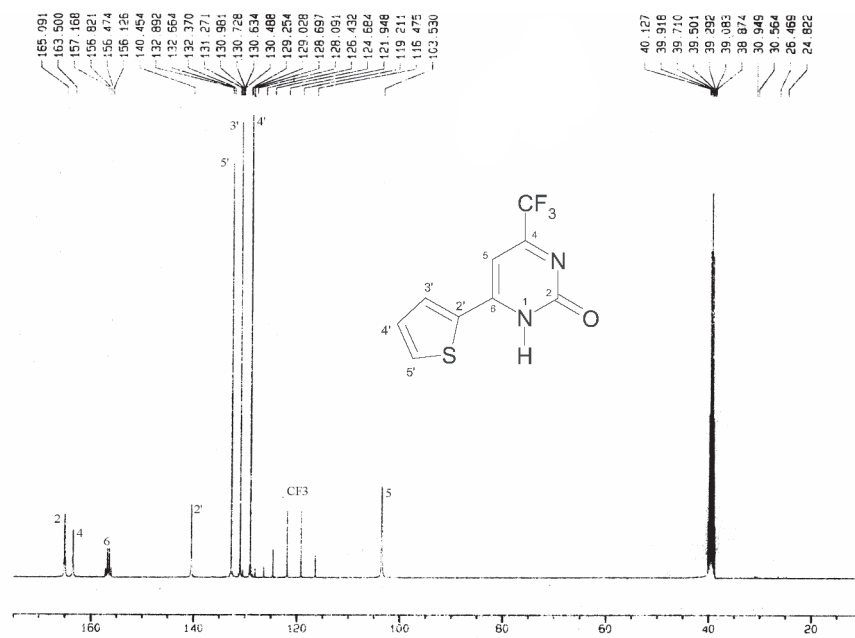


Figure S4. ¹³C NMR spectrum of the 6-(2-thienyl)-4-trifluoromethyl-1H-pyrimidin-2-one (2b), DMSO-*d*₆.

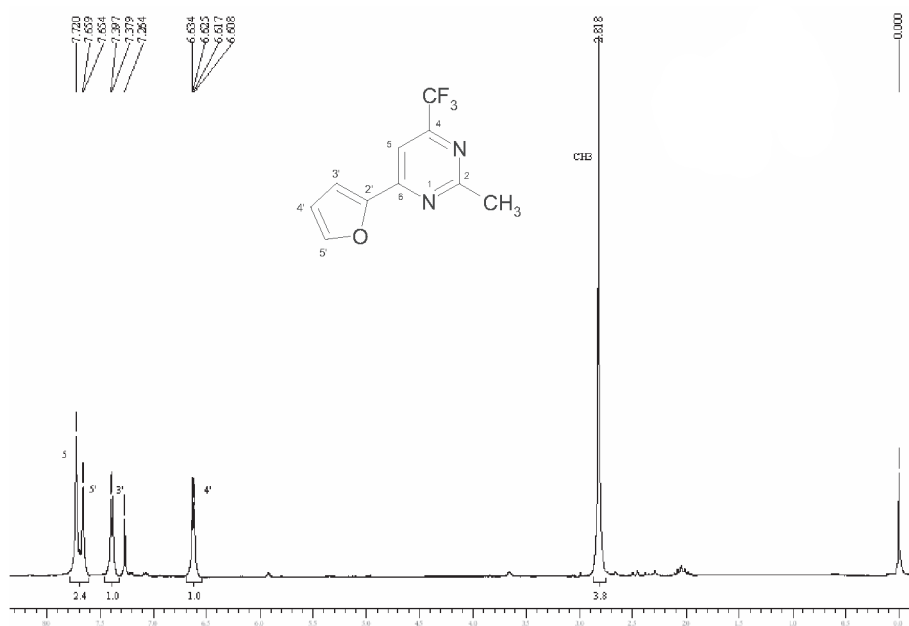


Figure S5. ¹H NMR spectrum of the 6-(2-furyl)-2-methyl-4-trifluoromethylpyrimidine (3a), CDCl₃.

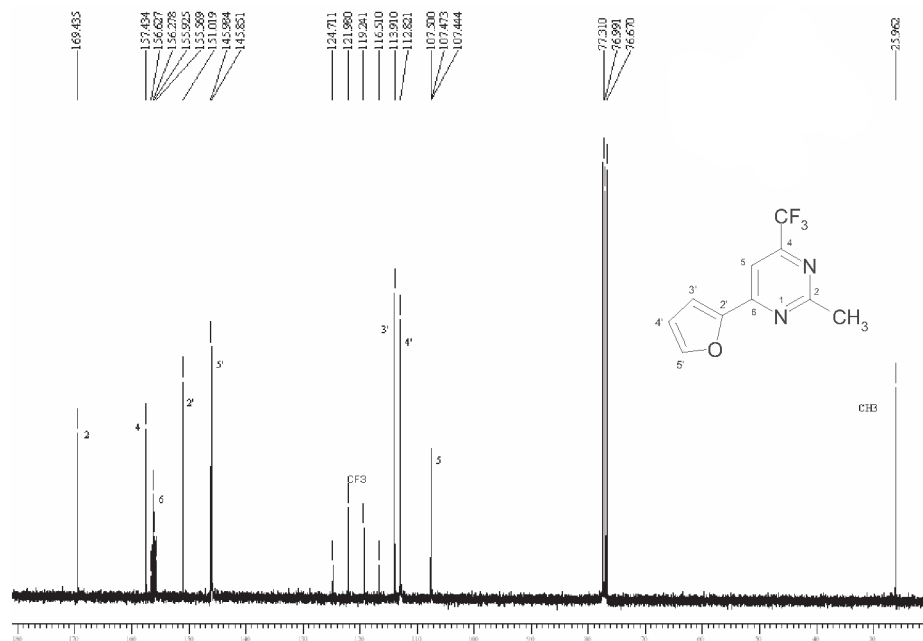


Figure S6. ¹³C NMR spectrum of the 6-(2-furyl)-2-methyl-4-trifluoromethylpyrimidine (**3a**), CDCl₃.

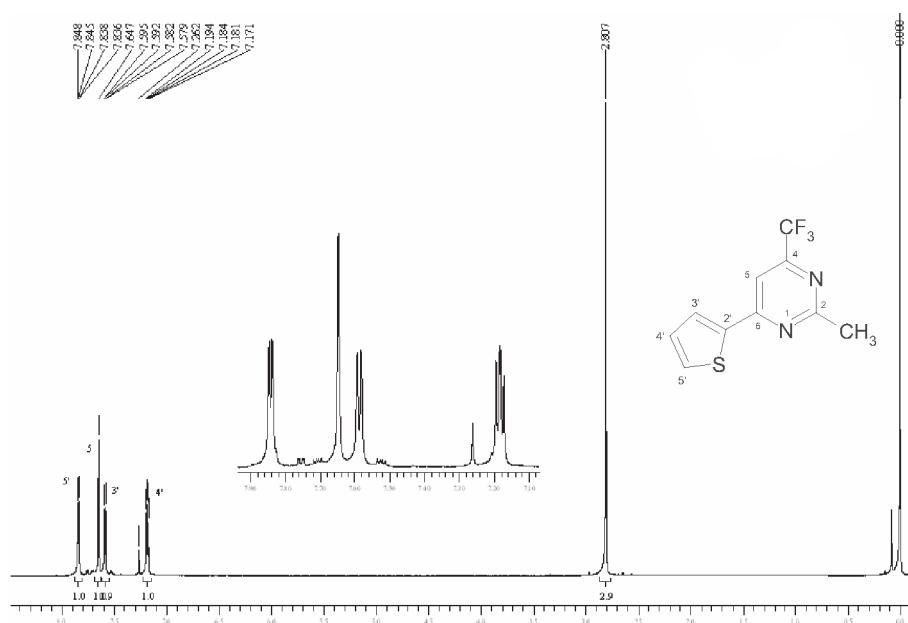


Figure S7. ¹H NMR spectrum of the 2-methyl-6-(2-thienyl)-4-trifluoromethylpyrimidine (**3b**), CDCl₃.

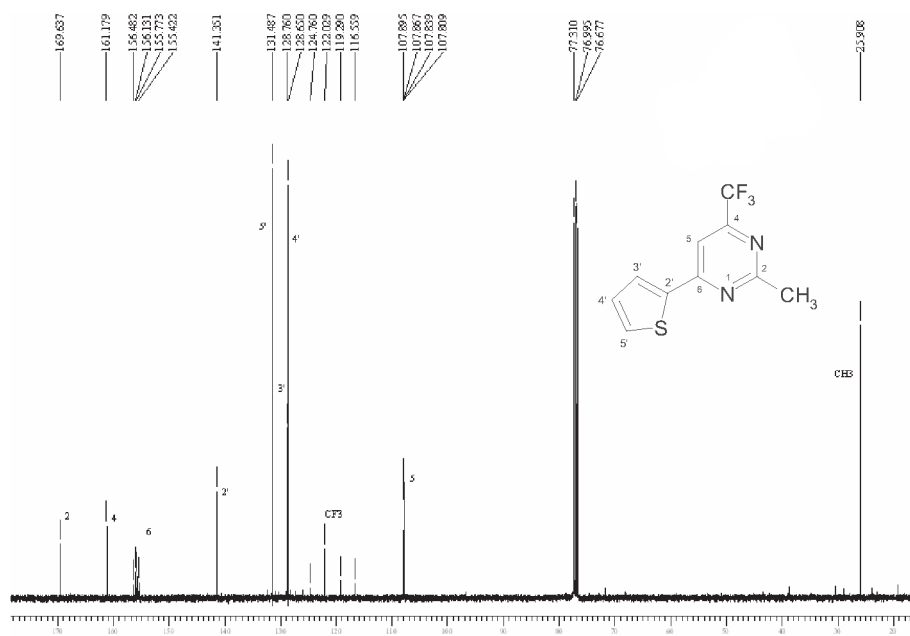


Figure S8. ^{13}C [H] NMR spectrum of the 6-(2-thienyl)-2-methyl-4-trifluoromethylpyrimidine **3b**, CDCl_3 .

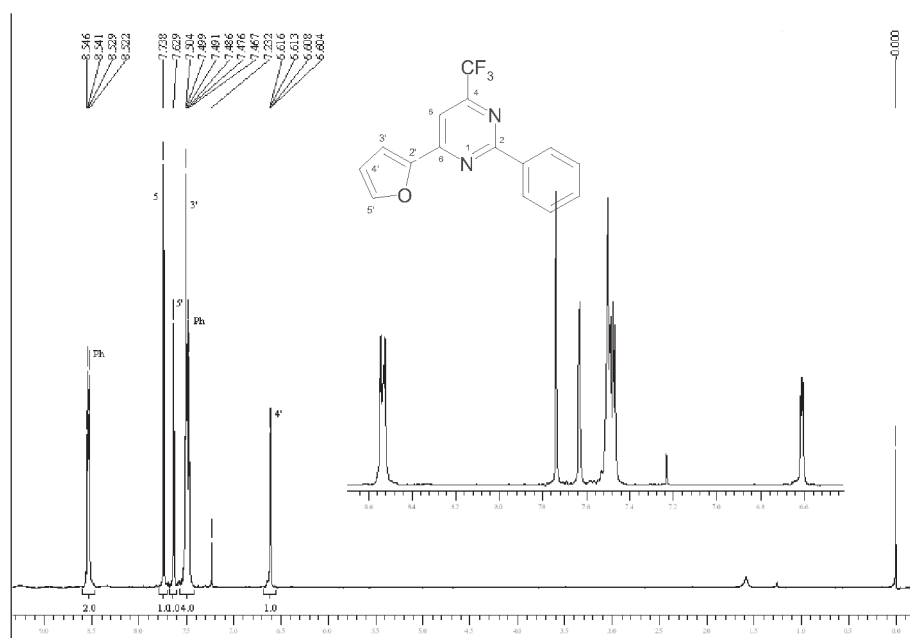


Figure S9. ^1H NMR spectrum of the 6-(2-furyl)-2-phenyl-4-trifluoromethylpyrimidine **4a**, CDCl_3 .

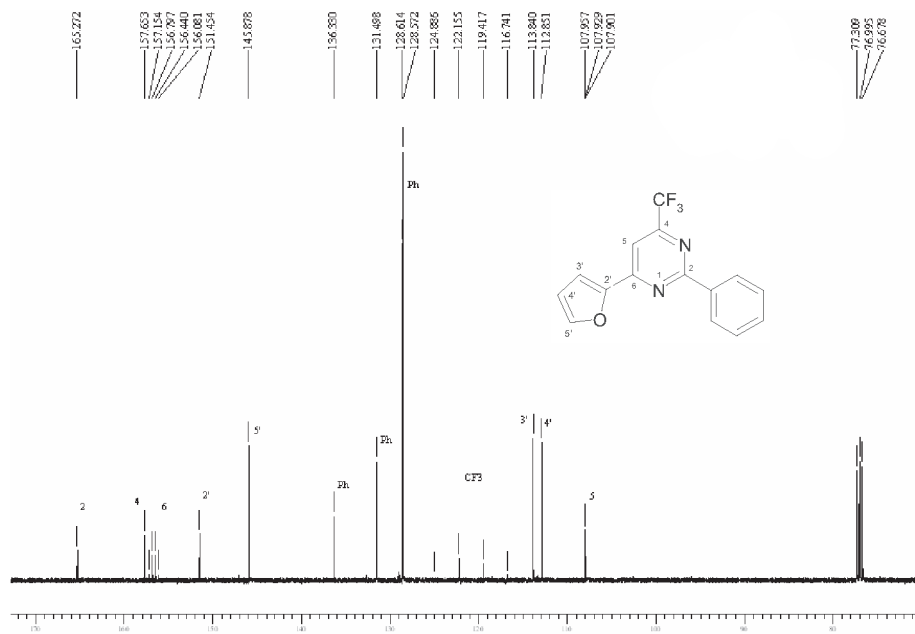


Figure S10. ^{13}C NMR spectrum of the 6-(2-furyl)-2-phenyl-4-trifluoromethylpyrimidine **4a**, CDCl_3 .

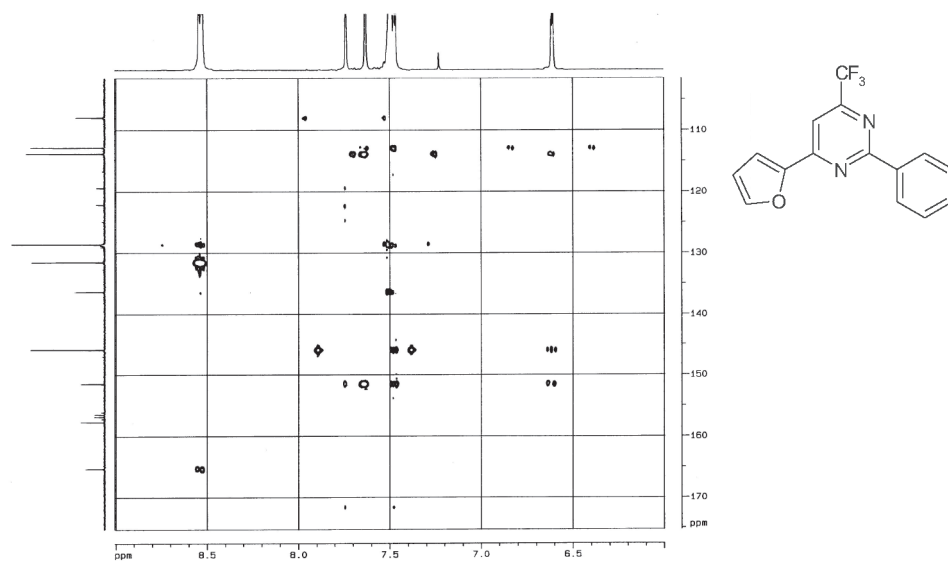


Figure S11. HMBC spectrum of the 6-(2-furyl)-2-phenyl-4-trifluoromethylpyrimidine **3b**, CDCl_3 .

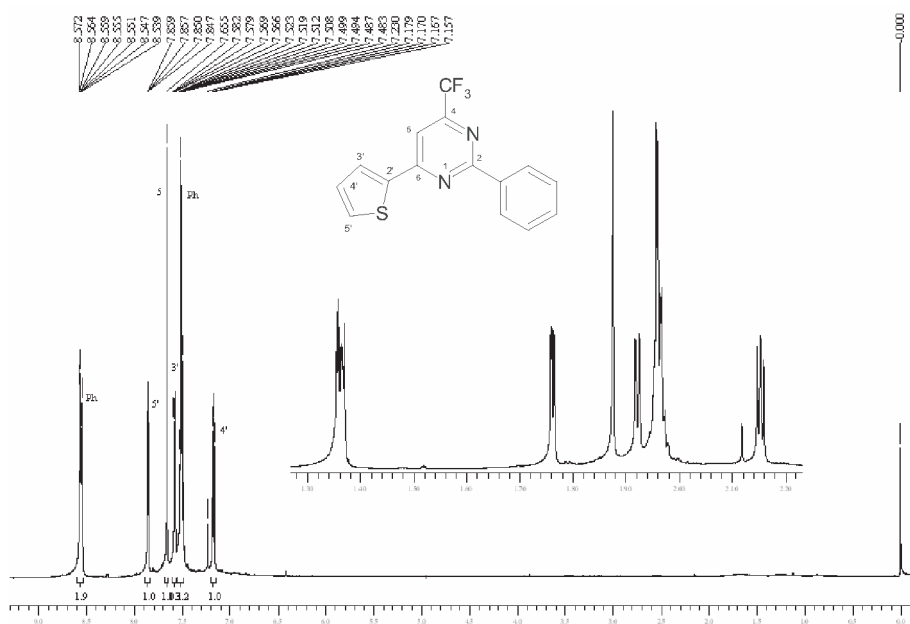


Figure S12. ^1H NMR spectrum of the 2-phenyl-6-(2-thienyl)-4-trifluoromethylpyrimidine **4b**, CDCl₃.

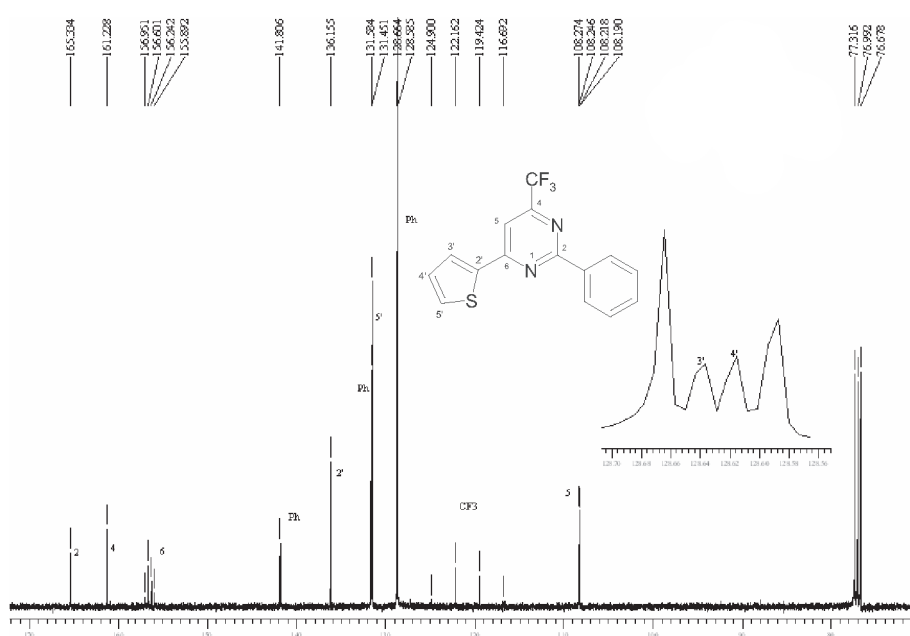


Figure S13. ^{13}C NMR spectrum of the 2-phenyl-6-(2-thienyl)-4-trifluoromethylpyrimidine **4b**, CDCl₃.

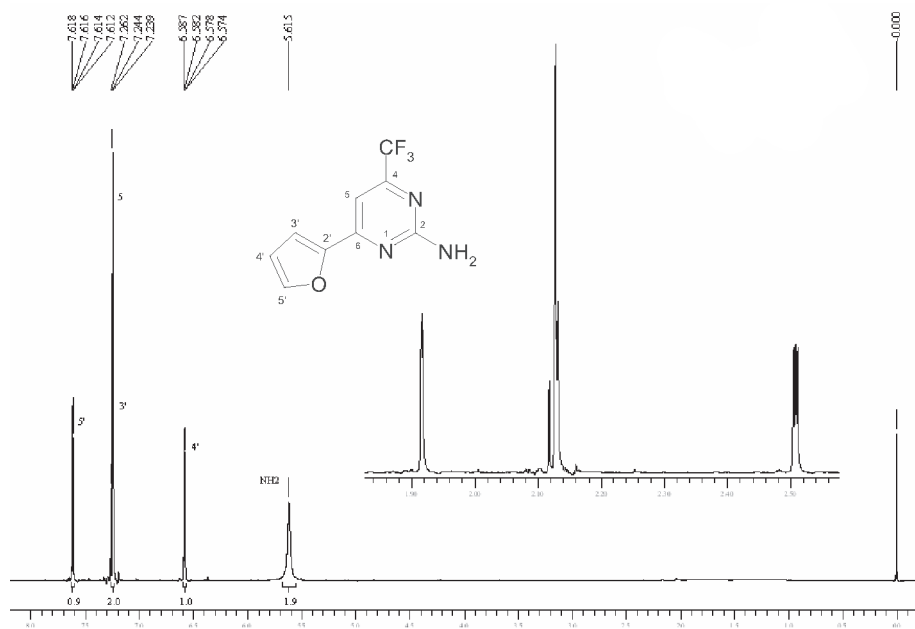


Figure S14. ¹H NMR spectrum of the 2-amino-6-(2-furyl)-4-trifluoromethylpyrimidine **5a**, CDCl₃.

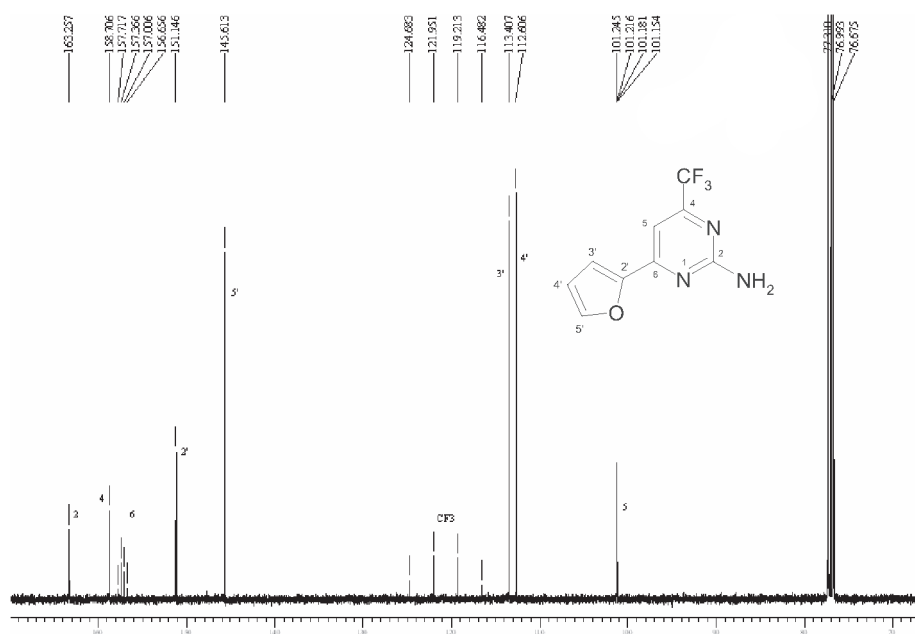


Figure S15. ¹³C [H] NMR spectrum of the 2-amino-6-(2-furyl)-4-trifluoromethylpyrimidine **5a**, CDCl₃.

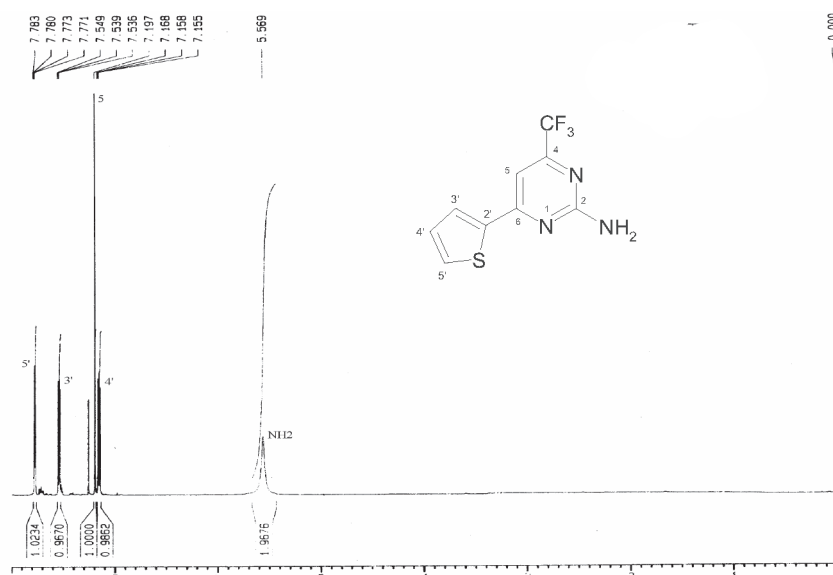


Figure S16. ¹H NMR spectrum of the 2-amino-6-(2-thienyl)-4-trifluoromethylpyrimidine **5b**, CDCl₃.

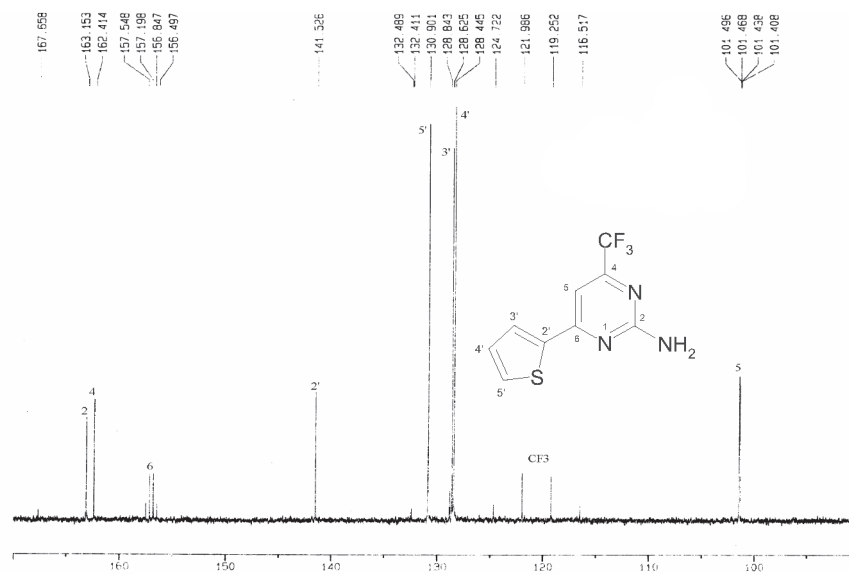


Figure S17. ¹³C NMR spectrum of the 2-amino-6-(2-thienyl)-4-trifluoromethylpyrimidine **5b**, CDCl₃.

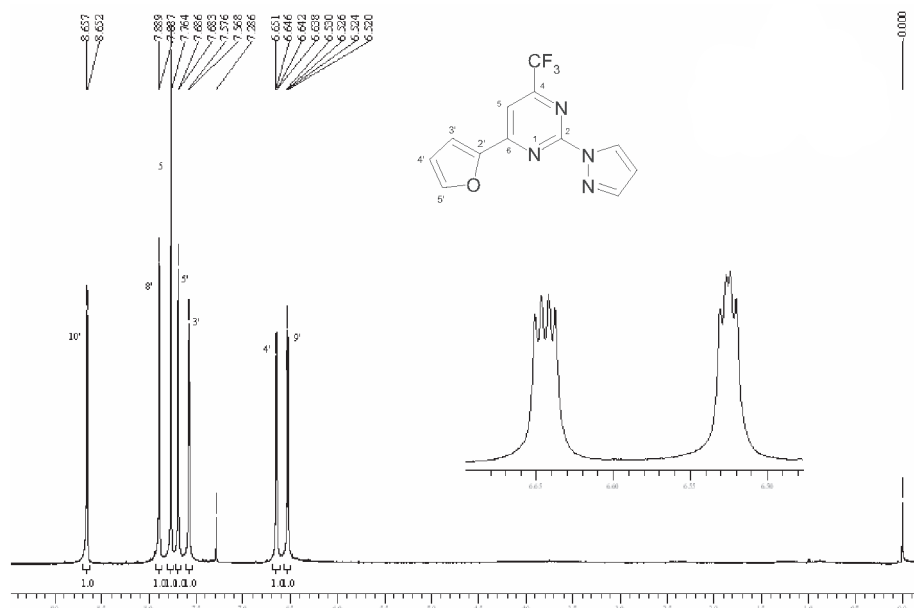


Figure S18. ^1H NMR spectrum of the 6-(2-furyl)-2-(1*H*-pyrazol-1-yl)-4-trifluoromethyl-pyrimidine **6a**, CDCl_3 .

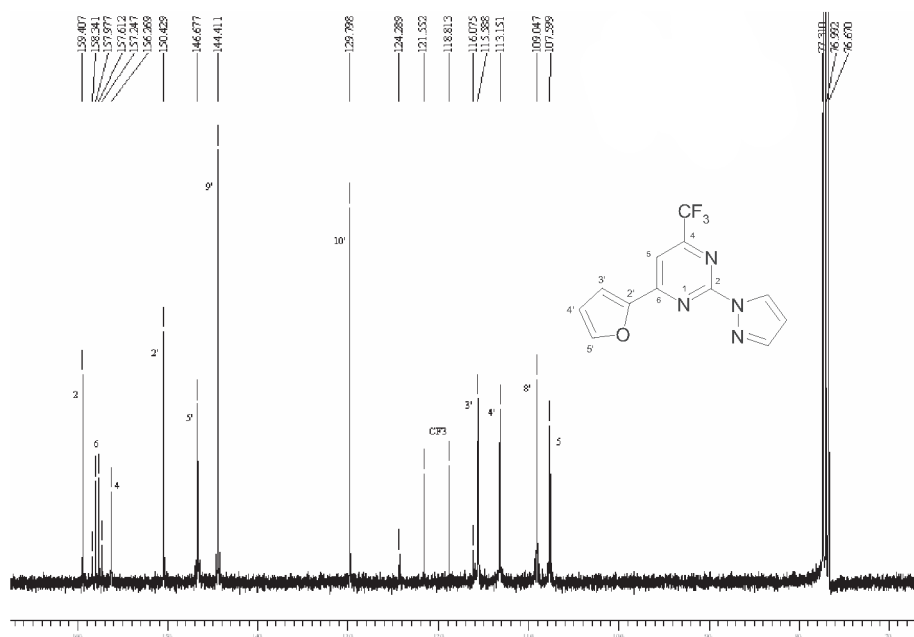


Figure S19. ^{13}C NMR spectrum of 6-(2-furyl)-2-(1*H*-pyrazol-1-yl)-4-trifluoromethyl-pyrimidine **6a**, CDCl_3 .

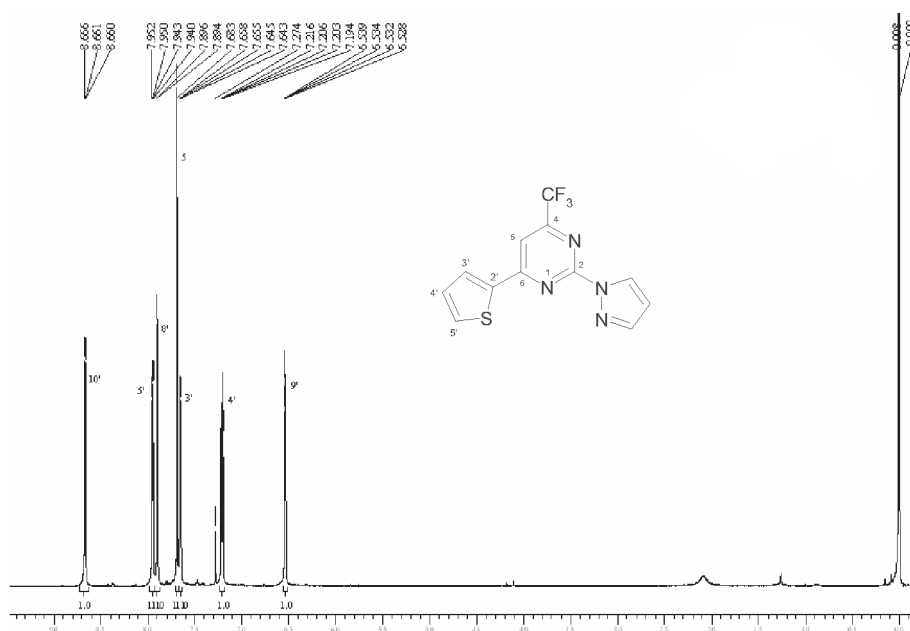


Figure S20. ¹H NMR spectrum of the 2-(1H-pyrazol-1-yl)-6-(2-thienyl)-4-trifluoromethylpyrimidine **6b**, CDCl₃.

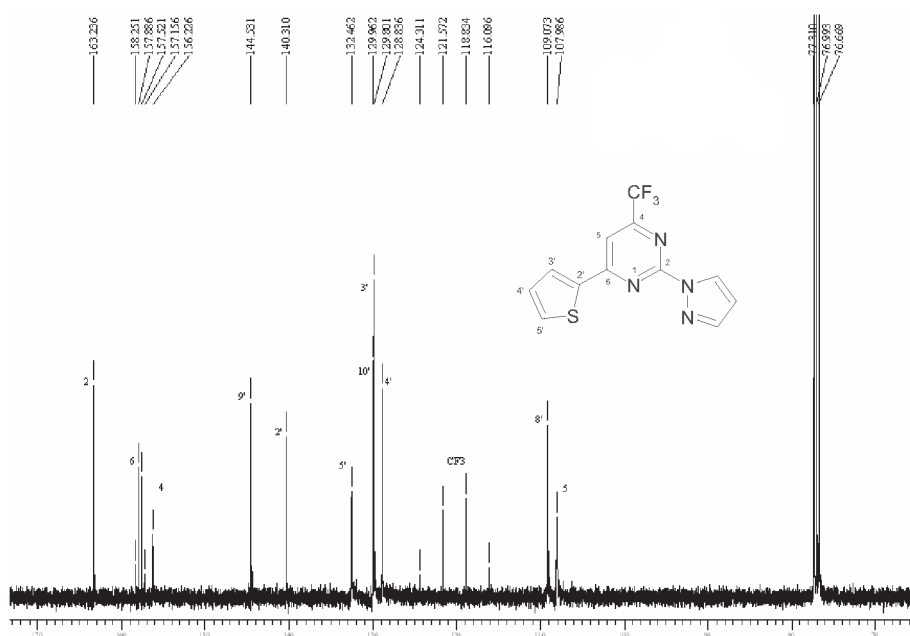


Figure S21. ¹³C NMR spectrum of the 2-(1H-pyrazol-1-yl)-6-(2-thienyl)-4-trifluoromethylpyrimidine **6b**, CDCl₃.

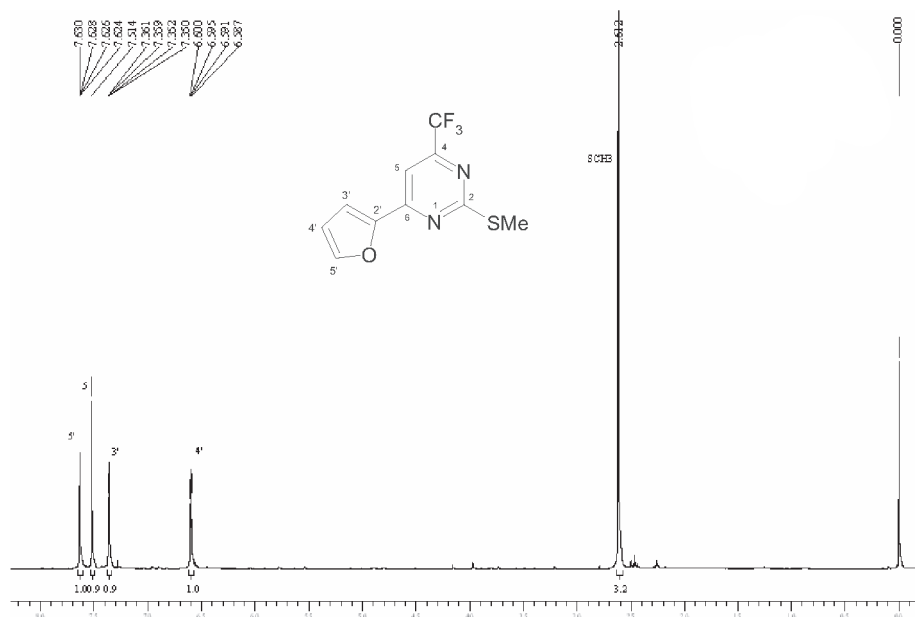


Figure S22. ^1H NMR spectrum of the 6-(2-furyl)-2-methyl-4-trifluoromethylpyrimidine **7a**, CDCl_3 .

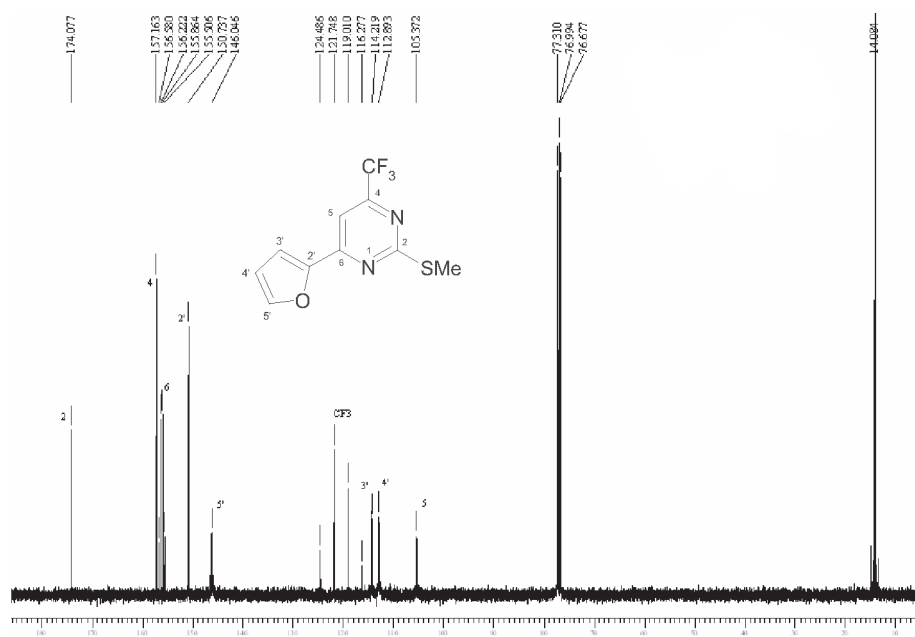


Figure S23. ^{13}C NMR spectrum of the 6-(2-furyl)-2-methyl-4-trifluoromethylpyrimidine **7a**, CDCl_3 .

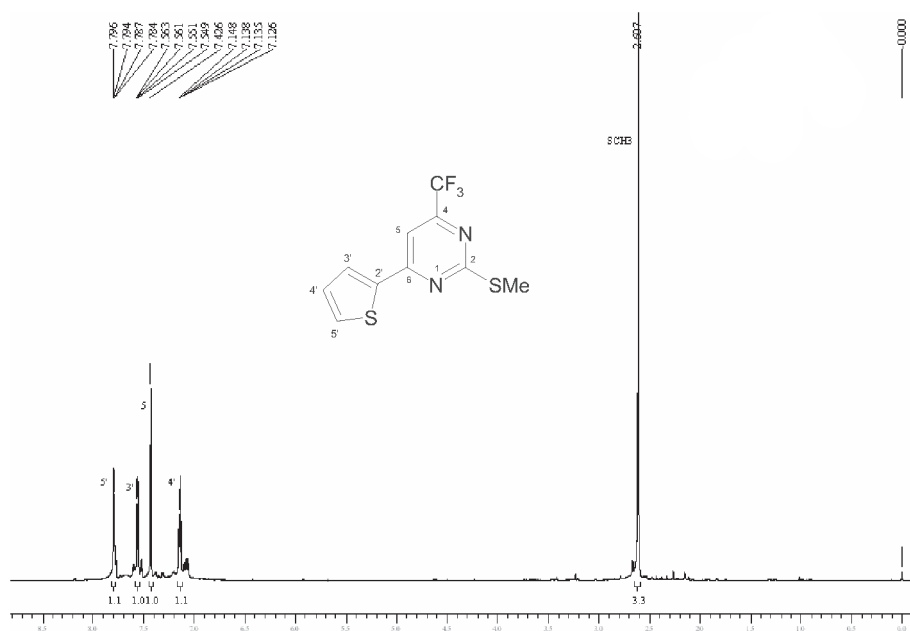


Figure S24. ¹H NMR spectrum of the 6-(2-thienyl)-2-methyl-4-trifluoromethylpyrimidine **7b**, CDCl₃.

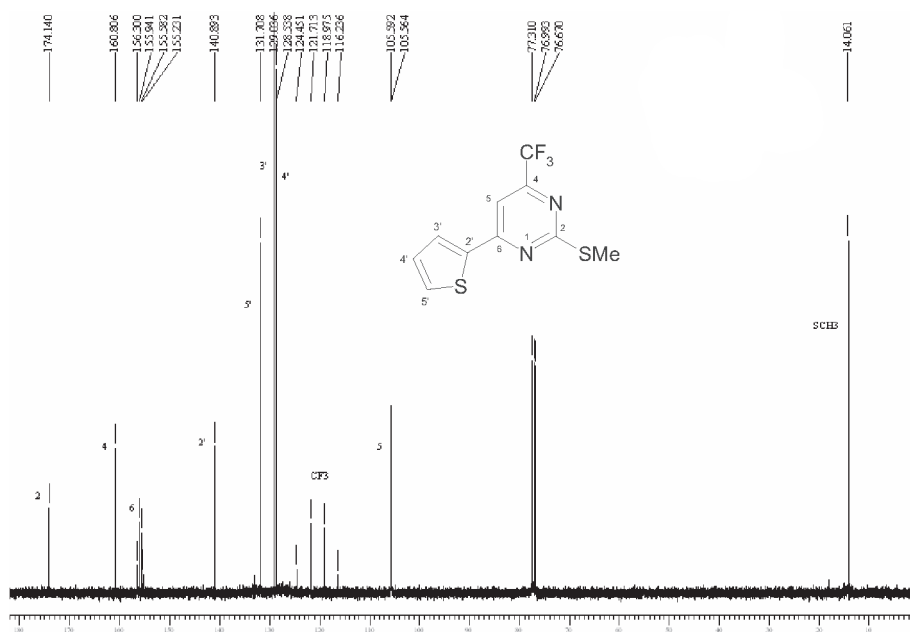


Figure S25. ¹³C NMR spectrum of the 6-(2-thienyl)-2-methyl-4-trifluoromethylpyrimidine **7b**, CDCl₃.

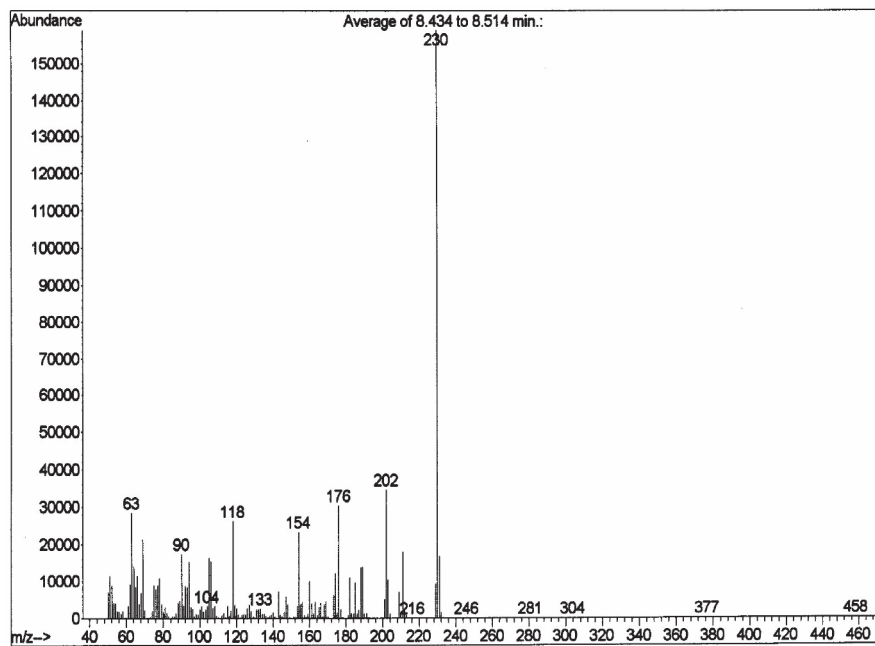


Figure S26. MS of 6-(2-furyl)-4-trifluoromethyl-1H-pyrimidin-2-one (2a).

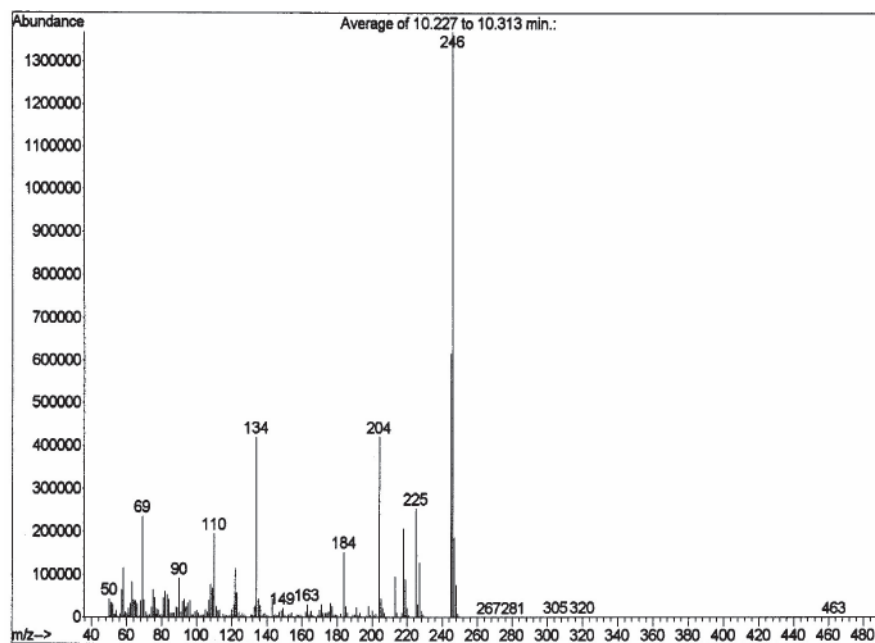


Figure S27. MS of 6-(2-thienyl)-4-trifluoromethyl-1H-pyrimidin-2-one (2b).

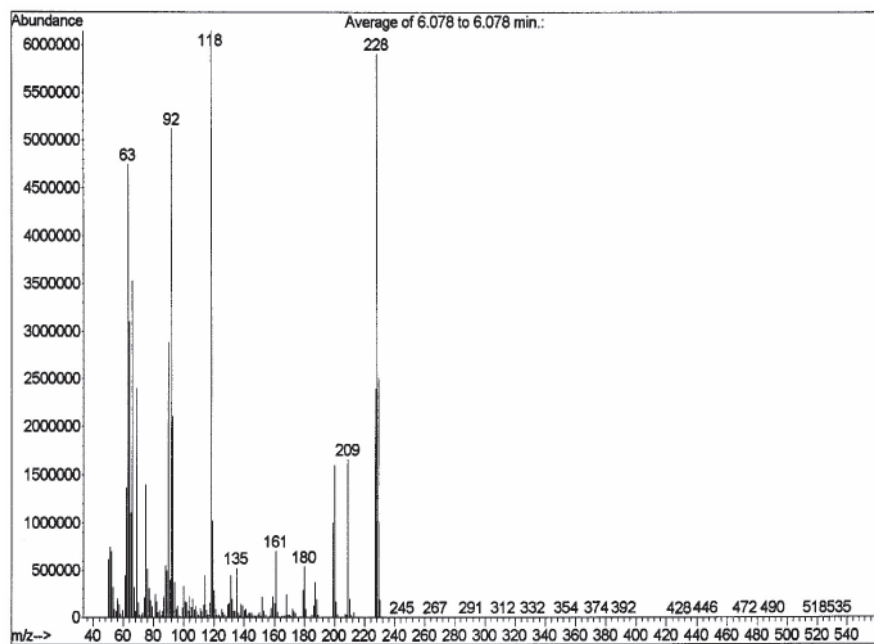


Figure S28. MS of 6-(2-furyl)-2-methyl-4-trifluoromethylpyrimidine (3a).

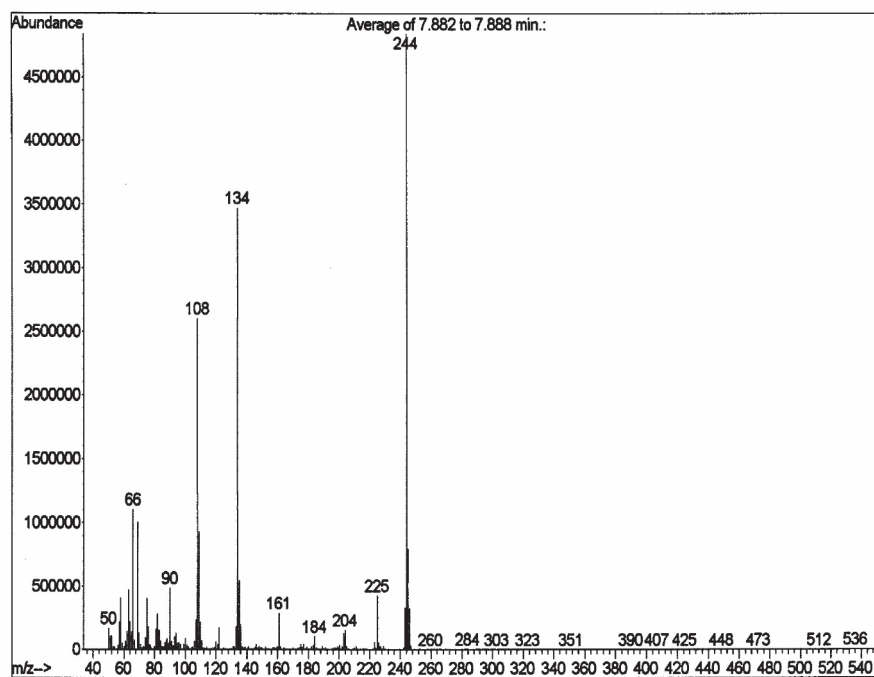


Figure S29. MS of 2-methyl-6-(2-thienyl)-4-trifluoromethylpyrimidine (3b).

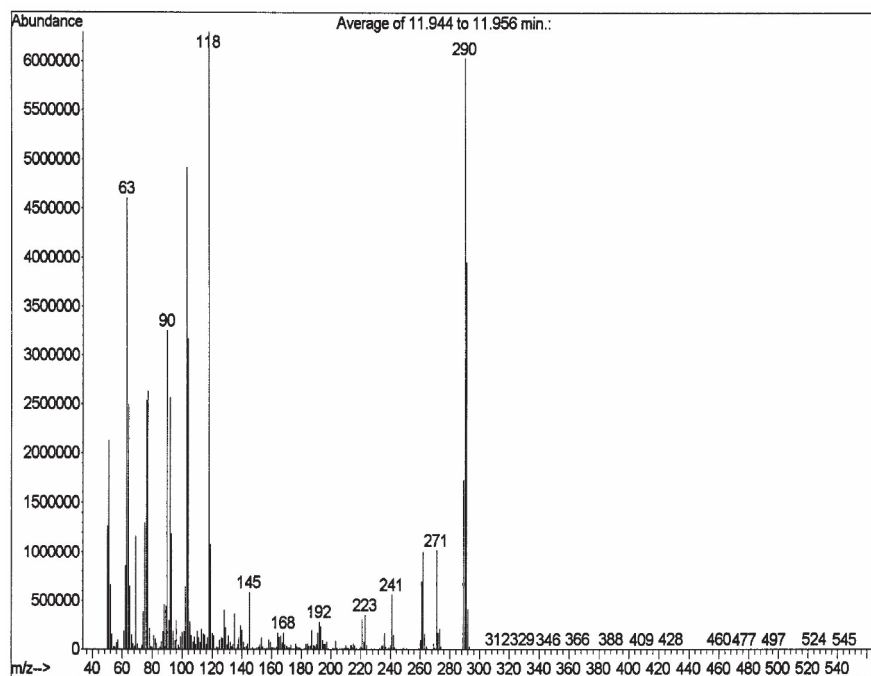


Figure S30. MS of 6-(2-furyl)-2-phenyl-4-trifluoromethylpyrimidine (4a).

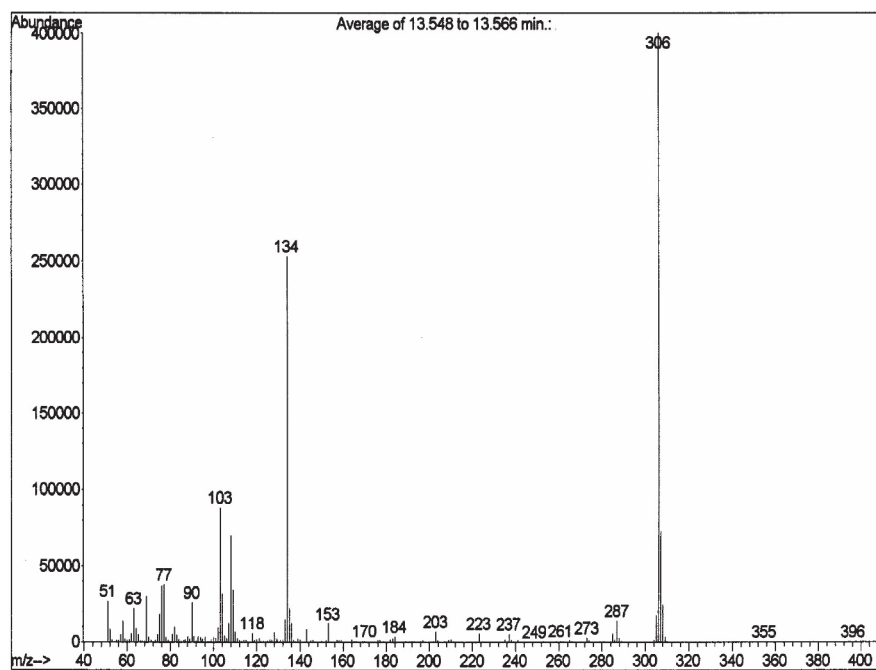


Figure S31. MS of 2-phenyl-6-(2-thienyl)-4-trifluoromethylpyrimidine (4b).