



formation of 2-methylbenzo[*b*]furan derivatives is as follows: (1) Claisen rearrangement of **6** to **7**; (2) acid-catalyzed cyclization of **7** to **8**; (3) spontaneous loss of HCl to form **9**.

**Characterization of Prepared Compounds.** **3**: Yield 72%; <sup>1</sup>H-NMR (CDCl<sub>3</sub>) δ2.09 (s, 3H), 2.17 (s, 3H), 2.48 (d, *J*=1 Hz, 3H), 6.26 (d, *J*=1 Hz, 1H), 7.15 (d, *J*=9.9 Hz, 1H); MS (70 eV) *m/z* 53 (43), 54 (43), 307 (M<sup>+</sup>, 100).

**4**: Yield 69%; <sup>1</sup>H-NMR (CDCl<sub>3</sub>) δ1.80 (m, 4H), 2.43 (m, 4H), 2.46 (s, 3H), 6.28 (d, *J*=1.1 Hz, 1H), 7.13 (d, *J*=9.8 Hz, 1H); MS (70 eV) *m/z* 52 (34), 77 (59), 79 (100), 107 (32), 333 (M<sup>+</sup>, 70).

**9a**: Yield 36%; <sup>1</sup>H-NMR (CDCl<sub>3</sub>) δ2.44 (s, 3H), 6.36 (d, *J*=1.1 Hz, 1H), 7.13-7.50 (m, 4H); MS (70 eV) *m/z* 103 (10), 131 (85), 132 (M<sup>+</sup>, 100).

**9b**: Yield 75%; <sup>1</sup>H-NMR (CDCl<sub>3</sub>) δ2.39 (s, 3H), 6.25 (d, *J*=0.9 Hz, 1H), 7.09-7.39 (m, 3H); MS (70 eV) *m/z* 51 (39), 165 (100), 166 (M<sup>+</sup>, 81), 167 (39), 168 (25).

**9c**: Yield 45%; <sup>1</sup>H-NMR (CDCl<sub>3</sub>) δ2.51 (s, 3H), 6.52 (d, *J*=0.7 Hz, 1H), 7.43-8.39 (m, 3H); MS (70 eV) *m/z* 77 (48), 103 (49), 131 (46), 177 (M<sup>+</sup>, 100).

**9d**: Yield 63%; <sup>1</sup>H-NMR (CDCl<sub>3</sub>) δ2.47 (d, *J*=1 Hz, 3H), 6.33 (d, *J*=1 Hz, 1H), 7.17-7.30 (q, 2H); MS (70 eV) *m/z* 102 (27), 165 (25), 199 (85), 200 (M<sup>+</sup>, 100), 201 (64), 202 (60).

**9e**: Yield 38%; <sup>1</sup>H-NMR (CDCl<sub>3</sub>) δ2.40 (s, 3H), 2.45 (s, 3H), 2.47 (s, 3H), 2.51 (s, 3H), 6.39 (d, *J*=1 Hz, 1H), 6.87 (s, 1H); MS (70 eV) *m/z* 159 (99), 173 (65), 174 (M<sup>+</sup>, 100).

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## References

- (a) P. Cagniant and D. Cagniant, "Advances in Heterocyclic Chemistry," Vol. 18, A. R. Katritzky and A. J. Boulton, Eds., Academic Press, New York, 1975, pp. 337-482; (b) D. M. X. Donnelly and M. J. Meegan, "Comprehensive Heterocyclic Chemistry," Vol. 4, A. R. Katritzky and C. W. Rees, Eds., Pergamon Press, New York, 1984, pp. 657-712.
- (a) W. K. Anderson and E. J. LaVoie, *J. Chem. Soc. Chem. Commun.*, 174 (1974); (b) W. K. Anderson, E. J. LaVoie, and J. C. Bottaro, *J. Chem. Soc. Perkin Trans I*, 1 (1976); (c) C. D. Hurd and C. N. Webb, *J. Am. Chem. Soc.*, **58**, 2190 (1936); (d) D. R. Bender, J. E. Hearst, and H. Rapoport, *J. Org. Chem.*, **44**, 2176 (1979).
- (a) U. Rao and K. K. Balasubramanian, *Tetrahedron Lett.*, **24**, 5023 (1983); (b) N. Sarcevic, J. Zsindely, and H. Schmid, *Helv. Chim. Acta.*, **56**, 1457 (1973).
- (a) O. Wakabayashi, K. Matsuya, H. Ohta, T. Jikihara, and S. Suzuki, UK Patent Application GB 2046754 (1980); (b) H. Moser, G. Pissiotas, H-G. Brunner, B. Bohner, and M. Baumann, European Patent 0260228 (1987).
- R. P. Lutz, *Chem. Rev.*, **84**, 205 (1984).