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## APPENDICES

### Appendix A Data of compound 2

Compound 2: 60.0 % yield;  $R_f = 0.40$  (5% MeOH in  $\text{CHCl}_3$ ); colorless solid; mp = 123 °C; FTIR (KBr,  $\text{cm}^{-1}$ ): 3397 (br, OH), 1484 (vs, C-C), 1427 (m, N- $\text{CH}_3$ ), 1242 (m, C-N), 1215 and 1200 (m, C-N-C), 846 (m, C-N-C);  $^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ , ppm):  $\delta_{\text{H}}$  2.14 (12H, s, Ar- $\text{CH}_3$ ), 2.15 (3H, s, N- $\text{CH}_3$ ), 3.57 (4H, s, Ar- $\text{CH}_2$ -N), 6.66 (2H, s, Ar-H), 6.80 (2H, s, Ar-H).

### Appendix B Data of compound 3

Compound 3: 57.7 % yield;  $R_f = 0.13$  (5% MeOH in  $\text{CHCl}_3$ ); mp = 53 °C white powder; FTIR (KBr,  $\text{cm}^{-1}$ ): 3077 (s, =C-H), 1639 (s, C=C, allyl), 1225 (s, C-O-C, aromatic ether), 997 (s, C-H, allyl), 917 and 910 (d, oxazine ring), 751 and 691 (s, *ortho*-substituted benzene);  $^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ , ppm):  $\delta_{\text{H}}$  1.25 (4H, m,  $\text{CH}_2$ ), 1.54 (2H, m,  $\text{CH}_2$ ), 1.85 (4H, dd,  $\text{CH}_2$ ), 2.72 (1H, m, N-CH), 3.28 (2H, d, - $\text{CH}_2$ ), 3.85 (3H, s, O- $\text{CH}_3$ ), 4.05 (2H, s, Ar- $\text{CH}_2$ -N), 5.03 (2H, s, O- $\text{CH}_2$ -N), 5.06 (2H, m, = $\text{CH}_2$ ), 5.93 (1H, m, =CH), 6.39 (1H, s, Ar-H), 6.54 (1H, s, Ar-H).

### Appendix C Data of compound 4

Compound 4: 44.9 % yield;  $R_f = 0.63$  (5% MeOH in  $\text{CHCl}_3$ ); mp = 110 °C colorless solid; FTIR (KBr,  $\text{cm}^{-1}$ ): 3345 (br, OH), 3077 (s, =C-H), 1640 (s, C=C allyl), 1501 (vs, C-C), 1448 (m, N- $\text{CH}_3$ ), 1249 (vs, C-N), 1214 (C-N-C), 994 (s, C-H allyl), 851 (s, C-N-C);  $^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ , ppm):  $\delta_{\text{H}}$  1.25 (4H, m,  $\text{CH}_2$ ), 1.54 (2H, m,  $\text{CH}_2$ ), 1.85 (4H, dd,  $\text{CH}_2$ ), 2.20 (3H, s, Ar- $\text{CH}_3$ ), 2.16 (3H, s, Ar- $\text{CH}_3$ ), 2.62 (1H, m, N-CH), 3.28 (2H, d, - $\text{CH}_2$ ), 3.67 (2H, s, N- $\text{CH}_2$ ), 3.78 (2H, s, N- $\text{CH}_2$ ), 3.85 (3H, s, O- $\text{CH}_3$ ), 5.05 (2H, m, = $\text{CH}_2$ ), 5.93 (1H, m, =CH), 6.58 (1H, s, Ar-H), 6.63 (2H, s, Ar-H), 6.80 (1H, s, Ar-H).

## CURRICULUM VITAE

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