

**Supporting Information Available.** MS fragments of compounds **3**, **4**, **5**, **6** and **7**.

**1,4a,5,7a-Tetrahydro-N,4,7-trimethyl-N-phenyl-cyclopenta(c)pyran-1-amine**

**(3).** MS (EI)  $m/z$  255 (18%), 199 (15%), 198 (100%), 182 (14%), 91 (9.9%), 77 (15%).

**Gastrolactol (4).** MS (EI)  $m/z$  168 (1%), 167 (19%), 166 (100%), 148 (14%), 138 (9%), 137 (18%), 133 (12%), 123 (11%), 121 (16%), 120 (10%), 119 (23%), 109 (35%), 108 (14%), 107 (25%), 105 (43%), 95 (31%), 93 (15%), 91 (34%), 84 (50%), 83 (31%), 82 (42%), 81 (27%), 80 (72%), 79 (42%), 77 (25%), 67 (21%), 65 (11%), 55 (25%), 53 (14%), 43 (23%), 41 (24%), 39 (20%).

**Gastrolactyl acetate (5).** MS (EI)  $m/z$  208 (15%), 148 (100%), 137 (21%), 133 (12%), 121 (12%), 120 (16%), 119 (34%), 109 (21%), 108 (10%), 107 (19%), 105 (24%), 95 (18%), 84 (33%), 83 (14%), 82 (21%), 81 (14%), 80 (51%), 79 (13%), 77 (12%), 55 (11%), 43 (81%), 41 (12%).

**Gastrolactone (6).** MS (EI)  $m/z$  164 (87%), 136 (54%), 121 (42%), 108 (14%), 107 (100%), 105 (18%), 93 (40%), 91 (75%), 82 (11%), 80 (75%), 79 (37%), 77 (31%), 65 (14%), 53 (14%), 51 (11%), 41 (15%), 39 (23%).

**(4a*R*, 7*S*, 7a*S*)-nepetalactone (7) (*cis,cis*-nepetalactone).** MS (EI)  $m/z$  166 (98%), 151 (11%), 138 (15%), 137 (14%), 124 (12%), 123 (97%), 121 (14%), 111 (25%), 110 (18%), 109 (57%), 107 (12%), 105 (14%), 96 (22%), 95 (78%), 94 (22%), 93 (15%), 91 (13%), 85 (26%), 84 (14%), 83 (16%), 82 (33%), 81 (100%), 80 (51%), 79 (20%), 77 (16%), 69 (83%), 68 (58%), 65 (10%), 55 (31%), 53 (25%), 43 (20%), 41 (59%), 39 (39%).