



23.1 mmol) in dry toluene (100 cm<sup>3</sup>) was added butadiene **2** (20 cm<sup>3</sup>, 112.5 mmol) and hydroquinone (catalytic amount). After the reaction mixture had been heated at 105 °C for 24 h in a closed glass container, its NMR spectra showed disappearance of the starting nitroalkene and formation of the adducts **4** and **5** (1:1). Evaporation of the solvent led to an oily residue that crystallised (ether–light petroleum) to yield a 1:1 mixture of adducts **4** and **5** (7.0 g, 53%) (Found: C, 50.2; H, 5.9; N, 2.4. C<sub>24</sub>H<sub>37</sub>NO<sub>13</sub>Si requires C, 50.07; H, 6.48; N, 2.43%). Crystallisation of the residue from aqueous methanol gave compounds **6** and **7** (1:1 mixture) (7.2 g, 62%). Fractional crystallisation from CCl<sub>4</sub> gave pure adduct **6** (3.1 g, 27%); m.p. 162–164 °C; δ<sub>H</sub>(CDCl<sub>3</sub>) 4.99 (dd, *J*<sub>1',5</sub> 8.0 Hz, 1'-H), 4.55 (br d, 3-H), 4.37 (dd, *J*<sub>3,4</sub> 8.3, *J*<sub>4,5</sub> 11.2, 4-H) and 2.65 (br d, 5-H); δ<sub>C</sub>(CDCl<sub>3</sub>) 90.3 (C-4), 71.7 (C-1'), 71.1 (C-3) and 35.8 (C-5) (Found: C, 50.1; H, 5.85; N, 2.8. C<sub>21</sub>H<sub>29</sub>NO<sub>13</sub> requires C, 50.10; H, 5.81; N, 2.78%).

Treatment of adduct **6** with Ac<sub>2</sub>O–Py gave its fully acetylated derivative **8** (75%); m.p. 70–72 °C; δ<sub>H</sub>(CDCl<sub>3</sub>) 5.69 (br d, 3-H), 5.01 (dd, *J*<sub>1',5</sub> 8.4, 1'-H), 4.56 (dd, *J*<sub>3,4</sub> 8.5, *J*<sub>4,5</sub> 8.7, 4-H) and 2.73 (m, 5-H); δ<sub>C</sub>(CDCl<sub>3</sub>) 86.4 (C-4), 72.1 (C-3), 71.6 (C-1') and 35.9 (C-5).

**Diels–Alder Reaction of Nitroalkene 1 and Buta-1,3-dien-1-yl Acetate.**—Following the procedure described above, cycloaddition of nitroalkene **1** (6.0 g, 13.9 mmol) and the butadiene **3** (4.9 cm<sup>3</sup>, 41.6 mmol) was achieved in 96 h. Evaporation of the toluene led to an oil that crystallised (methanol) to yield the adduct **9** (5.7 g, 75%); m.p. 173 °C; δ<sub>H</sub>(CDCl<sub>3</sub>) 5.59 (t, 3-H), 5.05 (dd, *J*<sub>1',5</sub> 9.0, 1'-H), 4.82 (dd, *J*<sub>3,4</sub> 4.6, *J*<sub>4,5</sub> 9.0, 4-H) and 2.86 (m, 5-H); δ<sub>C</sub>(CDCl<sub>3</sub>) 83.1 (C-4), 70.9 (C-1'), 65.2 (C-3) and 32.8 (C-5) (Found: C, 50.9; H, 5.75; N, 2.2. C<sub>23</sub>H<sub>31</sub>NO<sub>14</sub> requires C, 50.64; H, 5.73; N, 2.57%).

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