

dried rapidly first by swirling the ether phase over KOH pellets and decantation followed by anhydrous MgSO_4 . Following filtration, the golden-colored filtrate containing 1-diazo-2-[2-(benzyloxy)ethoxy]ethane (**8**) was used immediately in subsequent reactions: IR (neat, cm^{-1}) 3090, 3032, 2067, 1463, 1368, 1250, 1100, 750, 700.

The aforementioned filtrate containing **8** was added to a solution of 1.25 g (15 mmol) of methyl propiolate in 10 mL of anhydrous Et_2O . The mixture was stirred at 27 °C for 4 h, after which TLC analysis (hexane/ EtOAc , 1:1) indicated that the reaction had proceeded to completion (during this time, the solution color changed from golden to light yellow). The reaction mixture was concentrated in vacuo, and the residue was purified by column chromatography (EtOAc /hexane, 1:1) yielding **7** (2.16 g, 59% from **12**) as a colorless syrup: R_f = 0.5 (silica, EtOAc /hexane, 75:25); IR (neat, cm^{-1}) 3233, 3010, 2885, 1725, 1450, 1233, 1100, 750; ^1H NMR (90 MHz, CDCl_3) δ 12.98 (br s, 1 H, pyrazole NH), 7.28 (s, 5 H, ArH), 6.76 (s, 1 H, pyrazole H-4), 4.61 (s, 2 H, pyrazole- CH_2), 4.53 (s, 2 H, ArCH_2O), 3.86 (s, 3 H, CH_3), 3.63 (s, 4 H, $\text{OCH}_2\text{CH}_2\text{O}$); ^{13}C NMR (22.5 MHz, CDCl_3) 161.78, 144.23, 140.44, 137.57, 128.14, 127.54, 107.18, 72.99, 69.42, 69.04, 64.32, 51.75 ppm. Anal. Calcd for $\text{C}_{15}\text{H}_{18}\text{N}_2\text{O}_4$: C, 62.05; H, 6.25; N, 9.65. Found: C, 61.85; H, 6.10; N, 9.54.

3(5)-[2-(Benzyloxy)ethoxy]methylpyrazole-5(3)-carboxamide (14). A solution of **7** (0.9 g, 3.1 mmol) in 15 mL of freshly distilled MeOH was saturated with NH_3 at 3 °C, and the resulting mixture was heated in a sealed glass tube at 115 °C for 40 h. Upon cooling, TLC analysis (EtOAc /hexane, 75:25) indicated that the reaction had proceeded to completion. The solution was then concentrated in vacuo, and the residue was purified by silica gel column chromatography (CHCl_3 /MeOH/ H_2O , 65:10:4, lower phase) to yield **14** (0.8 g, 94%) as a white solid. Recrystallization of this material from EtOH /benzene afforded white crystals: mp 86–88 °C; R_f = 0.43 (silica, CHCl_3 /MeOH/ H_2O , 65:10:4, lower phase); IR (KBr, cm^{-1}) 3360, 3200, 3090, 2880, 2800, 1680, 1660, 1610, 1580, 1510, 1410, 1360, 1305, 1105, 766, 690; ^1H NMR (90 MHz, CDCl_3 /DMSO- d_6) δ 12.83 (br s, 1 H, pyrazole NH), 7.30 (s, 5 H, ArH), 6.73 (s, 1 H, pyrazole H-4), 4.49 (br s, 2 H, CONH_2),

4.60 (s, 2 H, pyrazole- CH_2), 4.52 (s, 2 H, ArCH_2O), 3.64 (s, 4 H, $\text{OCH}_2\text{CH}_2\text{O}$); ^{13}C NMR (22.5 MHz, CDCl_3 /DMSO- d_6) 164.31, 145.62, 141.23, 138.03, 128.34, 127.74, 127.58, 105.37, 73.14, 69.51, 69.40, 64.14 ppm. Anal. Calcd for $\text{C}_{14}\text{H}_{17}\text{N}_3\text{O}_3$: C, 61.08; H, 6.22; N, 15.26. Found: C, 61.31; H, 6.23; N, 15.05.

3(5)-[2-Hydroxyethoxy]methylpyrazole-5(3)-carboxamide (6). A solution of 500 mg (91.8 mmol) of **14** in 20 mL of a 3:1 mixture of EtOH /cyclohexene was treated with 100 mg of $\text{PdO}\cdot x\text{H}_2\text{O}$. The mixture was refluxed for 1 h, after which TLC analysis (CHCl_3 /MeOH/ H_2O , 65:10:4, lower phase) showed complete loss of starting material. The reaction mixture was cooled and filtered through a pad of Celite that had been pre-washed with hot EtOH ; the Celite pad was then washed with hot EtOH , and the combined filtrates were concentrated in vacuo. The resulting pale yellow syrup was purified by column chromatography using silica gel (MeCN/ H_2O , 94:6) to yield **6** (310 mg, 95%) as a white solid. Recrystallization from EtOH /MeCN afforded **6** as white needles: mp 123–124 °C; R_f = 0.5 (silica, MeCN/ H_2O , 94:6); IR (KBr, cm^{-1}) 3360, 3200, 3090, 2985, 2910, 2875, 1670, 1610, 1510, 1410, 1105, 765, 685; ^1H NMR (90 MHz, DMSO- d_6) δ 13.20 (br s, 1 H, D_2O exch, pyrazole NH), 7.52 (br d, 2 H, D_2O exch, NH_2), 6.57 (s, 1 H, pyrazole H-4), 4.51 (s, 2 H, pyrazole- CH_2), 3.47 (s, 1 H, D_2O exch, OH), 3.37 (m, 4 H, CH_2CH_2); ^{13}C NMR (22.5 MHz, DMSO- d_6) 163.55, 146.76, 141.12, 104.77, 71.46, 62.52, 60.03 ppm. Anal. Calcd for $\text{C}_7\text{H}_{11}\text{N}_3\text{O}_3$: C, 45.40; H, 5.99; N, 22.69. Found: C, 45.47; H, 6.12; N, 22.68.

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Registry No. **2**, 129149-35-5; **6**, 129149-36-6; **7**, 129149-37-7; **8**, 129149-38-8; **9**, 118599-67-0; **10**, 118599-68-1; **11**, 118599-66-9; **12**, 129149-39-9; **13**, 129149-40-2; **14**, 129149-41-3; $(\text{CH}_3)_3\text{SiCN}$, 7677-24-9; 1,3-dioxolane, 646-06-0; methyl propiolate, 922-67-8.

Additions and Corrections

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Jean-Noël Denis, Arlene Correa, and Andrew E. Greene*.
An Improved Synthesis of the Taxol Side Chain and of RP 56976.

Page 1957, column 2. The title of this paper should be "An Improved Synthesis of the Side Chains of Taxol and RP 56976".