Ajmaline and *serpentine*, identical with reference alkaloids (m.p., m.m.p., chromogenic reactions, co-TLC (6 systems), UV, IR and MS. *Perakine*, yellowish-white crystals, m.p. 180–184°, UV_{max} 214,260 nm. IR: ν_{max}^{KBr} 3500, 3000, 1730, 1670 cm^{-1}. MS: *m/e* 350 (M^+), 335, 321, 308, 291, 196, 182, 169, 168. *Sarpagine*, greyish-white powder, m.p. 345–348°. UV_{max}: 224, 277 nm. IR: ν_{max}^{KBr} 3450, 3000, 1632, 1603, 1280, 1267, 1241, 1119 cm^{-1}. MS: *m/e* 310 (M^+), 309, 293, 281, 279, 263, 249, 239, 207, 182, 169, 168, 156, 154. *Tetrahydroalstonine*, white crystals, m.p. 242–246°. UV_{max}: 226, 291 nm. IR ν_{max}^{KBr} 3500, 3000, 1730, 1610, 1580 cm^{-1}. MS *m/e* 352 (M^+), 351, 350, 291, 221, 196, 182, 180, 169, 168, 154 (m/e 184 less abundant than *m/e* 169 indicates D/E *cis*). *Vomifoline*, white crystals, m.p. 186°. UV_{max}: 226, 280 nm. IR: ν_{max}^{KBr} 3400, 3000, 1720, 1630 cm^{-1}. MS: *m/e* 310 (M^+), 309, 292, 281, 249, 221, 209, 207, 195, 182, 169, 168, 156.

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2-METHOXY-1,4-NAPHTHOQUINONE IN *IMPATIENS GLANDULIFERA* AND RELATED SPECIES

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Key Word Index—*Impatiens glandulifera*; Balsaminaceae; Indian Balsam; 2-methoxy-1,4-naphthoquinone.

Plant. Impatiens glandulifera Royle. *Source.* Banks of river Vesdre, Forêt, Belgium. Considered as poisonous.[1] *Previous work.* 2-Methoxy-1,4-naphthoquinone[1] and lawsone from flowers of *I. balsamina.*[2]

Dried leaves were extracted with $CHCl_3$. After concentrating to dryness under reduced pressure, H_2O was added. After stiring and filtering, the aqueous solution was extracted with $CHCl_3$. Further purification by preparative TLC on silica gel with $CHCl_3$–*n*-C_6H_{14} 9:1 afforded amorphous **1**. Repeated crystallization from absolute ethanol yielded light yellow needles.

2-Methoxy-1,4-naphthoquinone. $C_{11}H_8O_3$, m.p.: 183°; λ_{max}^{EtOH} nm: 243, 248, 277 and 330 ($\log \epsilon$ 4·22, 4·24, 4·16 and 3·36); ν_{max}^{KBr} cm^{-1} 1680, 1645, 1600 and 1240. NMR: δ $CDCl_3$ 8·10 (2H, *m*), 7·75 (2H, *m*), 6·19 (1H, *s*), 3·93 (3H, *s*). MS: *m/e* 188(100) 173(33) 159(30) 158(57) 130(8) 104(10) 102(34) 89(49) 76(22) 69(15) 50(15).

Spectrophotometric estimation showed an amount of 0·1% of **1** in dried material of *I. glandulifera*. However, the presence of **1** could not be established in three other species, *I. noli-tangere* L. and *I. parviflora* DC. collected in Belgium, and *I. niamniamensis Gilg.* obtained from Rwanda. Lawsone was also not found in these four species.

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[1] FOURNIER, P. (1947) *Le Livre des Plantes Médicinales et Vénéneuses de France*, Vol. 1, p. 186. Paul Lechevalier, Paris.

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