

REFERENCES

1. Hooker, J.D. and Jackson, B.D. 1885. Index Kewensis. vol. II, 1145. Oxford : Clarendon Press.
2. Durand, Th. and Jackson, B.D. 1886-1895. ibid. Supplementum I, 489. Oxford : Clarendon Press.
3. Thiselton-Dyer, W.T. 1896-1900. ibid. Supplementum II, 188. Oxford : Clarendon Press.
4. Prain, D. 1901-1905. ibid. Supplementum III, 185. Oxford : Clarendon Press.
5. Idem. 1906-1910. ibid. Supplementum IV, 242. Oxford : Clarendon Press.
6. Idem. 1911-1915. ibid. Supplementum V, 266. Oxford : Clarendon Press.
7. Hill, A.W. 1916-1920. ibid. Supplementum VI, 214. Oxford : Clarendon Press.
8. Idem. 1926-1930. ibid. Supplementum VIII, 244. Oxford : Clarendon Press.
9. Idem. 1931-1935. ibid. Supplementum IX, 291. Oxford : Clarendon Press.
10. Hooker, J.D. 1897. Flora of British India. vol. III, 28-34. London and Beecles : William Clowers & Sons Ltd.,
11. Saxton, J.E., edit. Manske, R.H.F. 1965. The Alkaloids. vol. VIII, 59-91. New York : Academic Press.

12. Burkill, I.H. 1870. A Dictionary of the Economic Products of the Malay Peninsula. vol. II, 2236-2245. Oxford : University Press.
13. Craib, W.B. 1932. Florae Siamensis Enumeratio. vol. II, 16-20. The Bangkok Times Press, Ltd.
14. Beckett, A.A., Shellard, E.J., Phillipson, J.D. and Lee, C.M. 1965. J. Pharm. Pharmac., 17:755.
15. Phillipson, J.D. and Hemingway, S.R. 1973. Phytochem., 12: 1481-1487 (a), 2791-2794 (b).
16. Phillipson, J.D. and Hemingway, S.R. 1974. ibid., 13:973-978.
17. Muell, F.V., John, S.R. and Lamberton, J.A. 1966. Tetrahedron Lett., 40:4883-4888.
18. Beecham, A.F., Hart, N.K., John, S.R. and Lamberton, J.A. 1967. Chem. Comm. 535-536.
19. Raymond-Hamet, 1963. Compt. Rend. Acad. Sci., 203:1383.
20. Idem. 1943. Bull. Soc. Chim. France, 10:129.
21. Chan, K.C. 1968. Tetrahedron Lett., 30:3403-3406.
22. Merlini, L., Mondelli, R., Nasini, G. and Hesse, M. 1967. Tetrahedron, 23:1571-1574.
23. Idem. 1970. ibid., 26:2259-2279.
24. Idem. 1967. ibid., 23:3129-3145.
25. Raymond-Hamet. 1953. J. Pharm. Pharmac., 170:239-240.
26. Kondo, H. and Ikeda, T. 1932. J. Pharm. Soc. Japan, 52:528.
27. Idem. 1941. ibid., 61:416-453.
28. Nozoye, T. 1958. Chem. Pharm. Bull. (Tokyo), 6:306.

29. Yeoh, G.B., Chan, K.C. and Morsingh, F. 1966. Tetrahedron Lett.,
9:931.
30. Kondo, H., Fukuda, T. and Tomita, M. 1928. J. Pharm. Soc. Japan,
48:321.
31. Aimi, N., Yamanaka, E., Endo, J., Sakai, S. and Haginiwa, J.
1972. Tetrahedron Lett., 11:1081-1084.
32. Yeoh, G.B., Chan, K.C. and Morsingh, F. 1966. J. Chem. Soc.,
C:2245.
33. Shellard, E.J. and Phillipson, J.D. 1964. Planta Med., 12:27.
34. Shellard, E.J., Phillipson, J.D. and Gupta, D. 1968. ibid.,
16:20.
35. Idem. 1969. ibid., 17:51(a), 146(b).
36. Shellard, E.J. and Houghton, P.J. 1971. ibid., 20:82.
37. Idem. 1972. ibid., 21:16, 263, 382.
38. Idem. 1972. ibid., 22:97
39. Idem. 1973. ibid., 24:13(a), 341(b).
40. Blumental, A., Eugster, C.H. and Karrer, P. 1954. Helv. Chim.
Acta. 37:787.
41. Karrer, P., Schwyzer, R. and Flam, A. 1952. ibid., 35:851.
42. Karrer, P. and Salomon, H. 1926. ibid., 9:1059.
43. Raymond-Hamet. 1933. C. R. Soc. Biol. Paris, 114:692.
44. Shellard, E.J., Tantivatana, P. and Beckett, A.H. 1967. Planta
Med., 15:306.
45. Tarpo, E.J., Tantivatana, P., Phillipson, J.D. and Shellard, E.J.
1973. Phytochem., 12:1507.

46. Houghton, P.J. and Shellard, E.J. 1973. Planta Med., 26:104-112.
47. Svoboda, G.H. 1957. J. Amer. Pharm. Ass. Sci. Ed., 46:508.
48. Muller, J.M. 1957. Experientia, 13:479.
49. Hochstein, F.A. 1955. J. Amer. Chem. Soc., 77:5744.
50. Janot, M.M. and Goutarel, R. 1944. C. R. Acad. Sci. Paris,
218:852.
51. Farnsworth, N.R. 1960. Diss. Abstr., 20:3266.
52. Shimizu, M. and Uchimar, F. 1958. Pharm. Bull. Tokyo, 6:324.
53. Moza, B.K. and Trojanek, J. 1962. Chem. and Ind. (Rev.), 1425.
54. Shellard, E.J., Beckett, A.H., Tantivatana, P., Phillipson, J.D.
and Lee, C.H. 1967. Planta Med., 15:245.
55. Au, T.Y., Cheung, H.T. and Sternhell, S. 1973. J. Chem. Soc.,
Perkin I : 13.
56. Henry, T.A. 1932. J. Chem. Soc., 2759.
57. Robinson, R. and Thomas, A.F. 1954. ibid., 3479.
58. Field, E. 1921. ibid., 119:887.
59. Denis, P. 1938. Bull. Acad. Belg. Sci., 24:653.
60. Ing, H.R. and Raison, C.G. 1939. J. Chem. Soc., 19:986.
61. Hendrickson, J.B. and Sims, J.J. 1963. Tetrahedron Lett., 14:929.
62. Beckett, A.H., Shellard, E.J. and Tackie, A.N. 1965. Planta Med.,
13:241.
63. Beckett, A.H., Shellard, E.J., Phillipson, J.D. and Lee, C.M.
1966. ibid., 14:266.
64. Trager, W.F., Lee, C.M., Phillipson, J.D. and Beckett, A.H. 1967.
Tetrahedron, 23:1043.

65. Shellard, E.J. and Rungsiyakul, D. 1973. Planta Med., 23:221.
66. Raymond-Hamet and Millat, L. 1937. J. Pharm. Chem., 25:391.
67. Michiels, L. and Leroux, M. 1925. Bull. Acad. Med. Belg., 5:403.
68. Michiels, L. 1935. J. Pharm. Belg., 17:1049.
69. Raymond-Hamet. 1939. Bull. Sci. Pharmacol., 46:327.
70. Badger, G.M., Cook, J.W. and Ongley, P.A. 1950. J. Chem. Soc.,
867.
71. Beckett, A.H., Shellard, E.J. and Tackie, A.N. 1963. J. Pharm.
Pharmac. (Suppl.), 15:138T.
72. Shellard, E.J. and Sarpong, K. 1970. J. Pharm. Pharmac., 22:34S.
73. Raymond-Hamet and Millat, L. 1934. Bull. Sci. Pharm., 41:533.
74. Shellard, E.J. and Sarpong, K. 1969. J. Pharm. Pharmac. (Suppl.),
21:113 S.
75. Shellard, E.J., Phillipson, J.D. and Sarpong, K. 1971. Phytochem.,
10:2505.
76. Shellard, E.J. and Sarpong, K. 1968. J. Pharm. Pharmac., 32:
692-703.
77. Cu, N.A., Goutarel, R. and Janot, M.M. 1957. Bull. Soc. Chim.
France, 108:1292.
78. Beckett, A.H., Shellard, E.J. and Tackie, A.N. 1963. J. Pharm.
Pharmac. (Suppl.), 15:166T.
79. Barger, G., Dyer, E. and Sargent, K.J. 1939. J. Org. Chem.,
4:418.
80. Denis, P. 1937. Bull. Acad. Belg. Sci., 23:174.

81. Seaton, J.C., Tondeur, R. and Marion, L. 1958. Canad. J. Chem. 36:1031.
82. Seaton, J.D., Nair, M.D., Edwards, O.E. and Marion, L. 1960. ibid., 38:1935.
83. Phillipson, J.D. and Shellard, E.J. 1967. J. Chromatog., 31: 427-438.
84. Saxton, J.E., edit. Manske, R.H.F., 1968. The Alkaloids, X, 521-543. New York : Academic Press.
85. Phillipson, J.D. and Shellard, E.J. 1966. J. Chromatog., 24: 84-92.
86. Finch, N. and Talor, W.I. 1962. J. Amer. Chem. Soc., 84:1318, 3871.
87. Shamma, M., Shine, R.J., Kompis, I., Sticzay, T., Morsingh, F., Poisson, J. and Pousset, J.L. 1967. ibid., 89:1739.
88. John. S.R. and Lamberton, J.A. 1966. Tetrahedron Lett., 40:4883.
89. Beecham, A.F., Hart, N.K., John, S.R. and Lamberton, J.A. 1967. ibid., 41:991.
90. Phillipson, J.D. and Shellard, E.J. 1968. J. Chromatog., 32: 692-703.
91. Rungsiyakul, D. 1973. The Alkaloids of Mitragyna tubulosa Havil. Thesis for the degree of Doctor of Philosophy, Chelsea College, University of London.
92. Wenkert, E. and Roychaudhuri, D.K. 1958. J. Amer. Chem. Soc., 80:1613.
93. Phillipson, J.D. 1971. Xenobiotica, 1:419.

94. Merlini, L., Nasini, G. and Phillipson, J.D. 1973. Tetrahedron,
28:5971.
95. Shamma, M. and Richey, J.M. 1963. J. Amer. Chem. Soc., 85:
2507-2512.
96. Wenkert, E. and Bringi, N.V. 1959. ibid., 81:1474.
97. Thomas, R. 1961. Tetrahedron Lett., 16:544.
98. Woodward, R.B. 1948. Nature, 162:155.
99. Jackson, A.H. and Smith, A.E. 1968. Tetrahedron, 24:403-413.
100. Idem. 1968. ibid., 24:2227-2239.
101. Trager, W.F., Phillipson, J.D. and Beckett, A.H. 1968. ibid.,
24:2681.
102. Wenkert, E. and Roychaudhuri, D.K. 1956. J. Amer. Chem. Soc.,
78:6417.
103. Idem. 1957. ibid., 79:1519.
104. Shavel, J. and Zinnes, H. 1962. ibid., 87:1320.
105. Shellard, E.J. 1974. Offprint from Bulletin on Narcotics,
XXVI(2):41-55.
106. Blackstock, W.P., Brown, A.T. and Lee, G.K. 1971. Chem. Comm.
910.
107. Djakouré, L., Jarreau, F.X., Goutarel, R. and Janot, M.M. 1972.
Compt. Rend. Acad. Sci. Paris, 274:1529.
108. Battersby, A.R., Brown, R.T., Knight, J.A., Martin, J.A. and
Plunkett, A.O. 1966. Chem. Comm. 888.
109. Battersby, A.R., Brown, R.T., Martin, J.A. and Plunkett, A.O.
1966. Chem. Comm., 810.

110. Chan, K.C. 1969. Phytochem., 8:219-222.
111. De Silva, K.T.D., Smith, G.N. and Warren, K.E.H. 1971. Chem. Comm., 905.
112. Hart, N.K., Johns, S.R. and Lamberton, J.A. 1967. ibid., 87.
113. Mahler, H.R. and Cordes, E.H. 1966. Biological Chemistry,
New York : Harper and Row.
114. Qureshi, A.H. and Scott, A.I. 1968. Chem. Comm., 945.
115. Wenkert, E. 1962. J. Amer. Chem. Soc., 84:98.
116. Battersby, A.R., Gregory, B., Spencer, H., Turner, J.C., Janot,
M.M., Potier, P., Francois, P. and Levisalles, J. 1967.
Chem. Comm., 219.
117. Battersby, A.R., Burnett, A.R. and Parsons, P.G. 1968. ibid.,
1282.

V I T A

Name Miss Yupa Silpvisavanont

Education B.Sc. in Pharm. (Mahidol University Faculty of
Pharmacy) in 1971

Position and Site of the Employer's Office

Medical Representative of Wellcome (Thailand) Ltd.