

**Dacrydium intermedium** Kirk ("Yellow silver pine").

ESSENTIAL OIL: Kaurene, isokaurene, rimuene, cupressene.—

Aplin, R. T., Cambie, R. C., 1964. *N.Z. J. Sci.*, 7: 258.

(See also under respective diterpenes.)

HEARTWOOD: Unidentified acids.—

Hosking, J. R., 1937. *N.Z. J. Sci. Tech.*, 33B: 206.

**Dacrydium colensoi** Hook. ("Silver pine").

ESSENTIAL OIL: (—)- $\alpha$ -Pinene, myrcene, (—)-limonene, terpinolene, unidentified tricyclic sesquiterpenes, b.p.s 89°/4.5mm, 93°/4.5mm, (+)-longifolene, unidentified tricyclic sesquiterpene, b.p. 91°/2.5mm, unidentified dicyclic sesquiterpene, b.p. 94°/2mm, muurolene (?), (+)- $\beta$ -cadinene, (+)-juniperol (macrocarpol), phyllocladene, isophyllocladene, rimuene.—

Blackie, W. J., 1929. *J. Soc. chem. Ind. Lond.*, 48: 357T.

Blackie, W. J., 1930. *J. Soc. chem. Ind. Lond.*, 49: 26T.

Briggs, L. H., 1937. *J. chem. Soc.*: 79.

Briasco, J. D., Murray, J., 1952. *J. appl. Chem.*, 2: 187.

Aplin, R. T., Cambie, R. C., Rutledge, P. S., 1963. *Phytochem.* 2: 205.

(See also under phyllocladene and rimuene.)

HEARTWOOD: Manoyl oxide, 2-oxomanoyl oxide, colensenone, dacrydol.—

Hosking, J. R., Brandt, C. W., 1934. *Chem. Ber.*, 67B: 1173.

Hosking, J. R., Brandt, C. W., 1935. *Chem. Ber.*, 68B: 37.

Hosking, J. R., Brandt, C. W., 1935. *Chem. Ber.*, 68B: 286.

Hosking, J. R., Brandt, C. W., 1936. *N.Z. J. Sci. Tech.*, 17: 750.

Grant, P. K., 1959. *J. N.Z. Inst. Chem.*, 23: 121.

Wenkert, E., Beak, P., Grant, P. K., 1961. *Chem. and Ind.*: 1574.

Grant, P. K., Carman, R. M., 1962. *J. chem. Soc.*: 3740.

Grant, P. K., Hill, N. R., 1964. *Aust. J. Chem.*, 17: 66.

(See also under manoyl oxide and 2-oxomanoyl oxide.)

**Phyllocladus alpinus** Hook. f. ("Alpine toatoa").

ESSENTIAL OIL: Phyllocladene, isophyllocladene.—

Briggs, L. H., 1937. *J. chem. Soc.*: 79.

Briggs, L. H., 1937. *J. Soc. chem. Ind. Lond.*, 56: 137T.

Brandt, C. W., 1938. *N.Z. J. Sci. Tech.*, 20: 8B.

Aplin, R. T., Cambie, R. C., Rutledge, P. S., 1963. *Phytochem.*, 2: 205.

(See also under phyllocladene.)

**Phyllocladus glaucus** Carr. ("Toatoa").

ESSENTIAL OIL: Phyllocladene, isophyllocladene, rimuene.—

Brooker, E. G., 1959. *N.Z. J. Sci.*, 2: 212.

Aplin, R. T., Cambie, R. C., Rutledge, P. S., 1963. *Phytochem.*, 2: 205.

(See also under phyllocladene and rimuene.)

BARK: Tannins, acetic acid ester of a bimolecular compound of lignoceryl and ceryl alcohols, ferulic acid ester of a bimolecular compound of lignoceryl and ceryl alcohols.—