source. Voucher specimen FF 12 has been deposited with the Herbarium of the Pharmaceutical Society at the University of Bradford, England. *Occurrence.* The savanna lands of tropical East Africa. *Uses.* Powdered root bark applied to swellings and a decoction is used to produce vomiting in fever.[1] Reported[2] to be used in the Chua district of Uganda as a substitute for quinine. *Previous work.* Skimmianine, angoline, angolinine and three other bases reported by TLC.[3]

Discussion. Ground root bark (400 g) extracted with light petroleum (40–60°) and then with $CHCl_3$ to exhaustion. Examination of the extracts by TLC (3 systems) indicated the presence of three bases. The bulked extracts were concentrated and extracted with 1 N HCl. A yellow precipitate was formed in the aqueous layer on standing and yielded chelerythrine chloride (1·2 g) (m.p. 202–203°) identical by m.m.p., UV and IR with an authentic sample. The aqueous extract was made alkaline and partitioned with $CHCl_3$ to yield skimmianine (7 mg) (m.p. 176°) identical by m.m.p., UV and IR with an authentic sample. The third base could not be isolated but appeared by TLC (3 systems) to be identical with an authentic sample of nitidine. The isolation of chelerythrine and the probable occurrence of nitidine rather than angoline and angolinine further supports the hypothesis that the latter are artefacts.[4]

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Key Word Index—Fagara chalybea; Rutaceae; alkaloids; chelerythrine; skimmianine; nitidine.

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MONOCOTYLEDONAE

GRAMINEAE

CHRYSOERIOL FROM BARLEY SEEDS

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Previous work. Pelargonidin, cyanidin and delphinidin in pericarp and aleurone tissues.[1] Cyanidin-3-arabinoside,[2] saponarin and orientin,[3] lutonarin and lutonarin-3′-methyl ether[4–5] from leaves.

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Present work. Barley seeds (*Hordeum vulgare* L. C_{138} variety*) were first extracted with light petroleum to remove lipids and then with 80% EtOH. The ethanolic extract was concentrated, diluted with an equal volume of H_2O and extracted with EtOAc. By preparative paper chromatography, compound *A* R_fs 0·78, (BAW 4:1:5) and 0·30 (in 30% HOAc) was isolated, further purified by P-TLC on polyamide in solvent system MeOH–HOAc–H_2O (18:1:1) which was shown to be a flavone by using different chromogenic reagents.[6] Compound *A* gave negative test with $FeCl_3$ solution while demethylated product gave positive reaction. Negative test with $NaIO_4$–benzidine[7] and zero R_f in 2% HOAc showed the absence of glycoside moiety. Alkaline degradation in N_2 gave phloroglucinol and vanillic acid, identified by co-PC with authentic samples.[8] UV spectra of compound *A* in MeOH, MeOH + NaOAc, MeOH + NaOAc + H_3BO_3, MeOH + $AlCl_3$, MeOH + $AlCl_3$ + HCl were found to be identical with that of 5,7,4′-trihydroxy, 3′-methoxyflavone.[9]

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* A hybrid variety released by Department of Plant Breeding, Punjab Agricultural University, Ludhiana, India.

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Key Word Index—Hordeum vulgare; Gramineae; barley; seed; chrysoeriol.