The *p*-nitrobenzoate and the 3,5-dinitrobenzoate were prepared from the alcohol and acyl chloride in pyridine and were much more easily obtained than the urethans. Some decomposition took place during the reaction but it was insignificant compared to that which took place in less basic solvents. The *p*-nitrobenzoate melted at 72.0–72.5° (*Anal.* Calcd. for $C_{10}H_9NO_4$: N, 6.77; C, 57.9; H, 4.38. Found: N, 6.80; C, 57.5; H, 4.59) and the 3,5-dinitrobenzoate melted at 108–109° (*Anal.* Calcd. for $C_{10}H_8N_2O_8$: N, 11.1; C, 47.6; H, 3.20. Found: N, 11.2; C, 47.4; H, 3.35).

The allophanate, prepared according to the method of Béhal,[6] sublimed at 179–181° with decomposition. *Anal.* Calcd. for $C_5H_8N_2O_3$: N, 19.4; C, 41.6; H, 5.59. Found: N, 19.6; C, 41.3; H, 5.63.

(6) Béhal, *Compt. rend.*, **168**, 945 (1919).

SCHOOL OF CHEMISTRY
RUTGERS UNIVERSITY
NEW BRUNSWICK, NEW JERSEY RECEIVED JUNE 25, 1943

An Examination of the Fatty Oil from Buffalo Gourd Seed

BY JOHN W. WOOD[1] AND HOWARD A. JONES[2]

The ground leaves, stems, fruit and root of the Buffalo gourd plant (*Cucurbita foetidissima*) are very attractive to several species of cucumber beetles.[3] During an examination of the plant for its attractive principle, the physical and chemical characteristics of the oil from the seeds were determined. The plant is a member of the same genus to which the pumpkin belongs. Although pumpkin seed oil has been studied extensively, no examination of the oil from *Cucurbita foetidissima* seeds has been reported.

The seeds, resembling small pumpkin seeds, contain 29.7% of an oil extractable by ether. The crude ether-extracted oil has a yellowish-green color in thin layers and a brownish-red color in moderately thick layers. The oil has a bland, fatty taste, and a peculiar fatty odor. The physical and chemical constants of the crude oil are given in Table I. The percentages of saturated and unsaturated acids were determined by the lead-salt–ether method,[4] and corrections were made for the small amount of unsaturated acids that are precipitated and weighed with the saturated acid fraction.

There is only a very small amount of glycerides of volatile acids present, as indicated by the low Reichert–Meissl and Polenske numbers. The low acetyl value, 7.51, indicates a small amount of glycerides of hydroxylated acids. The percentage of insoluble acids, 92.4, has been corrected for unsaponifiable matter and does not represent insoluble acids + unsaponifiable matter (Hehner number), which is commonly reported.

In general the characteristics of the oil are similar to those of pumpkin seed oil as reported by Riebsomer and Nesty.[5]

TABLE I

PHYSICAL AND CHEMICAL CONSTANTS OF BUFFALO GOURD SEED OIL

Density (30°), g./cc.	0.9179
Refractive index (Abbe 30°)	1.4728
Iodine number (Hanus)	140.8
Saponification value	190.2
Soluble acids, %	0.2
Insoluble acids, %	92.4
Acid value	16.5
Unsaponifiable matter, %	1.74
Reichert–Meissl number	0.23
Polenske number	0.14
Iodine number of unsaturated acids	151.2
Unsaturated acids (basis of oil), cor., %	85.67
Saturated acids (basis of oil), cor., %	5.59
Acetyl value	7.51

(1) Present address: National Bureau of Standards, Washington, D. C.

(2) Present address: Bureau of Entomology and Plant Quarantine, Orlando, Fla.

(3) Elmore and Campbell, *J. Econ. Entomol.*, **29**, 830 (1936).

(4) Jamieson, "Vegetable Fats and Oils," 1932, p. 351.

(5) Riebsomer and Nesty, THIS JOURNAL, **56**, 1784 (1934).

BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
AGRICULTURAL RESEARCH ADMINISTRATION
U. S. DEPARTMENT OF AGRICULTURE
BELTSVILLE, MD. RECEIVED MAY 21, 1943

NEW COMPOUNDS

Germanium (Iso)cyanate

The method used by Forbes and Anderson[1] for preparing the (iso)cyanates of silicon, boron and phosphorus has been found to be satisfactory for the preparation of germanium (iso)cyanate.[2] 59.1 g. of germanium tetrachloride was dissolved in 200 cc. of benzene, and 167 g. (an equivalent quantity) of powdered silver (iso)cyanate was added in small portions through a reflux condenser with shaking. The reaction proceeded rapidly with the evolution of considerable heat. The mixture was heated on a water-bath for one hour, allowed to cool, and filtered, the residue being washed with benzene. The filtrate was fractionally distilled and a yield of 45.3 g. (68%) of germanium (iso)-cyanate was obtained as a fraction boiling between 195 and 199°. This gave no test for chloride. It behaved like a pure compound and was evidently not a mixture of the

(1) Forbes and Anderson, THIS JOURNAL, **62**, 761 (1940).

(2) The term (iso)cyanate is used here to refer to a product which may be the cyanate, isocyanate, or a mixture of the two.