

16.5.04

AOAC Official Method 955.42 Insect Infestation (Internal) of Grains and Seeds (Except Wheat and Oats)

Cracking Flotation Method

First Action 1955

Final Action 1996

Mix grain by passing 6 times through Jones sampler, recombining separations before each pass. Separate slightly >100 g and weigh 100 g. Transfer weighed test portion, small amount at time, to 5 or 8 in. (12.7 or 20 cm) No. 12 sieve, and with stiff bristle brush, work insects through sieve as completely as possible.

Grind screened test portion in cutting-type mill set at 0.061 in. (1.5 mm). (Dry damp or tempered grain in forced-draft oven 1 h at 70 –80°C or 2 h in oven without draft.) Transfer cracked grain, including any residue in mill, to 2 L trap flask, **945.75B(h)(4)** (*see* 16.1.01), trap as in **970.66B(b)** (*see* 16.1.02), using 60% isopropanol saturated with heptane, **945.75C(n)** (*see* 16.1.01), and heptane, **945.75C(l)** (*see* 16.1.01), as solvents, and filter on 10XX bolting cloth, **945.75B(d)** (*see* 16.1.01). If considerable starchy material is in extract, hydrolyze with HCl as in **970.66B(d)** (*see* 16.1.02). Examine as in **970.66B(g)** (*see* 16.1.02) except use 15 \times as lower limit of magnification. Count only whole and equivalent insects and cast skins.