

TECHNICAL SECTION

JOURNAL OF
**Agricultural
and Food
Chemistry**

- Biochemical Engineering
- Fermentation
- Food Processing
- Nutrition
- Pesticides
- Plant Nutrients and Regulators

FOOD PROCESSING

Taste and Odor. Various chlorine compounds used in water treatment were reacted with amino acids and related compounds by Ingols, Hodgden, and Hildebrand in an effort to find out which nitrogenous pollutants of biological origin result in disagreeable tastes and odors in drinking water. Alanine, phenylalanine, arginine, and proline produced taste upon reaction with monochloramine and hypochlorous acid, and proline and phenylalanine produced a taste with chlorine dioxide.

pages
1068
to
1072

Plant Starch Analysis. Present time-consuming methods of determining quantitatively the amount of starch in plant materials prompted Carter and Neubert to investigate the possibilities of a rapid colorimetric method. The method assumes that the proportion of amylose starch to amylopectin is constant within a plant species at different stages of maturity. The method was found to be valid for four varieties of apples at the maturity range of commercial harvest and storage. Apple starch was found to be about 25% amylose.

NUTRITION—FERMENTATION

Thiamine-Pyramin Assay. Caster and Mickelsen propose that some new limitations be made in the conditions of the AOAC method for determining thiamine and pyramin in order to increase reliability. Their study indicates that several chemical and physical factors can effect the determination. Accurate determination of both compounds is important in the clinical and nutritional study of vitamin B₁ metabolism, since thiamine breaks down metabolically into pyramin.

pages
1073
to
1076

NUTRITION

Cottonseed Rations' Effect on Eggs. Ovalbumin is shown by Evans, Bandemer, Davidson, and Bauer to be the protein transferred from the egg white to the egg yolk in stored eggs from chickens fed cottonseed oil. The protein transfer is thought to be the cause of the salmon color of such egg yolks and the pink color and decrease in size of the egg white. A knowledge of the nature of this selective migration and further study of its properties may lead to a method for preventing the decrease in quality of "cottonseed" eggs.

pages
1077
to
1080

PESTICIDES

Acaricide Determination. A colorimetric and an ultraviolet method for determining the residues of the acaricide Chlorobenzilate on citrus products are proposed by Blinn, Gunther, and Kolbezen. Both methods are said to be specific for the acaricide.

pages
1080
to
1083