BIBLIOGRAFIA LATINOAMERICANA

BRASIL

Nutritional and processing evaluation of soybean *(Glycine max* (L) Merril) introduced germplasm (Avaliação nutricional e tecnológica de material de soja *(Glycine max* (L) Merril) introduzido.— Alfredo Lam-Sánchez, José Fernando Durigan, José Eduardo Dutra de Oliveira and Ricardo Bressani (Faculdade de Ciências Agrarias e Veterinárias—UNESP— Jaboticabal, SP, Brasil, Faculdade de Medicina de Ribeirão Preto —USP— Ribeirao Preto — SP, Brasil, and Institute of Nutrition of Central America and Panama (INCAP), Guatemala, C.A. Científica, São Paulo, 10(1): 87-97, 1982.

The present work had as objectives to make chemical, nutritional and processing evaluations in soybean germplasm previously introduced and agronomically tested in Jaboticabal. From the results obtained, it can be verified that oil and protein contents were influenced by the plant genotype and erivironmental conditions. The biological value of the soybean protein, measured by the PER method, was a consequence of the methionine content (r = 0.60*); cultivar "IAC-2" presented a PER value of 2.78, and also the highest contents of methionine and lysine. The results obtained showed that soybeans are a good source of lysine, which make them ideal to be used in mixtures with cereals. With relation to processing characteristics, a high variability among genotypes was observed for the speed of water absorption; and the hydratation ratio varied from 2.17 to 2.42, values presented by cultivar "Davis" and line "F 61-2926". "Davis" presented 5.90% of hard beans. The experimental time for cooking varied from 50 1/4 to 171 minutes. These values were presented by cultivars "Hardee" and "Santa Rosa". There was a negative tendency between hydratation ratio and the experimental time for cooking (r = —0.12). 25 Ref.

Chemical composition and nutritive value of corn *(Zea mays)* in two maturation

stages (Composição e valor nutritivo de quatro cultivares de milho *(Zea mays)* em dois estágios de maturação).— Valdemiro C. Sgarbieri, E. Contreras, J. Amaya, William J. da Silva and Felix G.R. Reyes (UNICAMP, SP, Brasil). Ciência e Tecnologia de Alimentos, 2(2): 180-192, 1982.

Chemical composition and nutritive value of Nutrimaiz (suo_2), a new double mutant cultivar of maize were studied with reference to the parent (Piramex sweet, $Su0_2$ and Maya Opaque-2, Suo_2) and Normal Maya ($Su0_2$) at 20 and 60 days after pollination (DAP). The lysine content dropped from 4.0 and 4.3% at 20 DAP to 2.0 and 2.9% at 60 DAP for the Normal and Sweet maize, respectively. Opaque-2 and Nutrimaiz presented the highest lysine and tryptophan contents at both stages of maturity. Nutrimaiz and the Sweet maize had at 60 DAP the highest (8.1 and 8.5%) contents of total lipids, which was correlated with a high proportion of germ in these cultivars. Neutral lipids (90-95% of total) increased with maturation whereas glycolipids and phospholipids decreased. Linoleic (47 to 53%) is the predominant fatty acid followed by oleic (25-35%) and linolenic and stearic (1-3%) each. The tocopherols increased while the carotenes decreased with maturation. The Sweet maize and Nutrimaiz contained a higher soluble sugar content than Normal and Opaque-2. Protein nutritive value, PER and rate of growth for the rats for Opaque-2 and Nutrimaiz at both stages of maturity were similar and close to casein. PER values, lower for Normal and Sweet maize than for Nutrimaiz at 20 DAP, decreased even further with maturation. 29 Ref.

Elaboration of sauerkraut with cabbage "Matsukase" *(Brassica oleraceae L. var. capitata L.)* in different maturation stages: centesimal composition and sensorial analysis (Elaboração de chucrute com repolho "Matsukase" *(Brassica oleraceae L. var. capitata L.)* em diferentes estadios de maturação: composição centesimal e análise sensorial).— José Santo Goldoni, Aparacida Alves da Silva, Martha María Mischan, Ismael Antonio Bonassi e Norberto da Silva (UNESP, Botucatu, SP, Brasil). Ciencia e Tecnologia de Alimentos, 2(2): 194-207, 1982.

The objective of the present work was to verify the centensimal composition and the organoleptic properties, in a study carried out with cabbage's cultivar "Matsukase" in different ripening stages, regarding sauerkraut production under natural lactic acid fermentation,

with controlled temperature (19 ± 0,5°C). Through the results obtained, no stressed centesimal composition differences among the samples harvested in the ripening stages studied, was verified. In the produced sauerkrauts, changes occurred in composition; however, they were similar for all treatments. The statistical analysis of the results obtained from the sensorial evaluation of the sauerkrauts, showed no significant difference among the treatments for all organoleptic characteristics studied, at the 5% level of probability; the same was true for the general quality (arithmetical means of all characteristics). 30 Ref.

Research into microorganisms in salads prepared with mayonnaise obtained in restaurants, snack bars and "rotisseries." (Pesquisa de alguns grupos de microrganismos em saladas com maionese adquiridas em restaurantes, lanchonetes e "rotisseries").— Sirdeia Maura Perrone Furlanetto, Ananias Azevedo Lacerda e Maria Lucia Cerqueira-Campos (Instituto de Ciencias Biomédicas da USP "Setor Saúde Pública", São Paulo, Brasil, e Faculdade de Farmácia da Universidade Federal da Bahia, Bahia, Brasil). Rev. Saúde públ., S. Paulo, 16: 307-316, 1982.

Twenty samples of mayonnaise-prepared salads obtained in restaurants, snack bars and "rotisseries" were analyzed for total plate count of mesophilic and psichrophilic bacteria, yeasts and moulds, enumeration and isolation of *Staphylococcus aureus*, *Bacillus cereus*, the MPN of totally coliform bacteria, *Escherichia coli* and fecal streptococci as well as for investigation into the occurrence of *Salmonella*. It was found, in total counts of coliform and streptococci, that numbers were high in many samples, showing the occurrence of contamination probably during the handling of the food. All the analyzed samples were positive to total coliforms as well as to *Escherichia coli* and fecal streptococci showing that the food had, at some point, suffered pollution of fecal origin. *Staphylococcus aureus* and *Bacillus cereus* in varying proportions were found in different samples. All the samples were showed to be negative for *Salmonella*. 27 Ref.

"Index of food quality": for the assessment of diets ("Indice de qualidade do alimento": uma medida da qualidade e da adequação de dietas).— Ignez Salas Martins (Faculdade de Saúde Pública da USP — São Paulo, SP — Brasil). Rev. Saúde públ., S. Paulo, 16: 329-336, 1982.

The "Index of Food Quality" (IFQ) and the discussion of some of

its possible applications are presented. To this end, and using the IFQ, the nutritional potential of some typical S. Paulo diets was analyzed. The usefulness of the IFQ in the preparation of menus, in the planning of school snacks, in enrichment and supplementary feeding programs, and in nutrition educational activities, are also emphasized. 12 Ref.

CHILE

Estado nutricional de menores de 5 años controlados en el Consultorio "La Pincoya".— Ignacio Hernández N., Carlos Ríos O., Haydee Sepúlveda e Ilse López (Hospital Roberto del Río y Facultad de Medicina de la Universidad de Chile). Pediatría, 25 (Nos. 3 y 4): 97-102, 1982.

En el presente estudio se analiza el estado nutricional de la población infantil bajo control en el consultorio La Pincoya, a las edades de 3, 5, 8, 12 y 18 meses, 2, 3 y 4 años. Para ello se aplican las tablas de peso/edad y peso/talla Sempé. Se encontró que más de la mitad de los niños son hijos de madres, que al momento del parto tenían entre 20 y 30 años; que en los hijos de madres de más de 25 años se observa un mayor peso de nacimiento, tanto en hombres como mujeres; un alto porcentaje de exceso de peso, especialmente en niños menores de 8 meses; un nivel de desnutrición que va desde 5.3% a los tres meses a 16% a los 12 meses, manteniéndose alrededor del 10% a los 4 años; 64.8% de niños normales en su peso en relación a la edad, y 2.6% de niños obesos, así como 11.1% de niños con sobrepeso. 9 Ref.

COLOMBIA

Tecnología apropiada en salazón de pescado.— Félix Moncada R. y Guillermo Sarmiento A. (Instituto de Investigaciones Tecnológicas, Bogotá, Colombia). Tecnología, No 135, p. 7-21, 1982.

Los ensayos sobre salazón y secado del pescado efectuados a escala de laboratorio y a escala artesanal, han permitido derivar las siguientes conclusiones:

Para evitar o retardar en lo posible las alteraciones que se presentan durante la elaboración del pescado salado, se han hecho las siguientes contribuciones tecnológicas al método artesanal, las cuales buscan en el producto final una calidad comparable a la que presentan pescados secos cuya tecnología y calidad son reconocidas comercialmente como excelentes: pescado proveniente de captura lo más reciente posible; salazón en salmuera saturada; empleo de agua limpia y potable para el lavado del pescado y la preparación

de la salmuera; esta última debe purificarse y una vez usada, tratarse convenientemente para la salazón siguiente; tratamiento fungistático para retardar la alteración ocasionada por microorganismos, y deshidratación del pescado salado-verde en el túnel secador.

Es factible construir un túnel secador, sencillo y económico para aprovechar las condiciones ambientales de las localidades donde hay una notable actividad artesanal en el curado del pescado.

Las mejoras y prácticas técnicas modificadas y adicionadas al método artesanal tradicional, fueron ampliamente aceptadas por los pescadores, por cuanto se disminuye notoriamente el tiempo de salazón, se recupera buena proporción de la sal usada, y al emplear el túnel secador para la deshidratación, no hay necesidad de guardar el pescado durante el secado.

El pescado salado y secado por el método usado en las demostraciones de campo, mereció una alta aceptación de gustatoria, según el ensayo efectuado entre familias de pescadores, por cuanto se ha mejorado el aspecto, sabor y textura del pescado reconstruido. La comunidad seleccionada consume con cierta regularidad esta clase de pescado y, por lo tanto, el resultado es más significativo. También se efectuó el ensayo de aceptación en la localidad donde se realizó la demostración de campo, por haberse encontrado que la especie bocachico es la de mayor abundancia y permanencia de captura en la región donde el salado alcanza la mayor producción. 15 Ref.