

SCIENTIA

International Review of Scientific Synthesis - Founded in 1907

Scientific Editorial Board: Piero Caldirola · Ludovico Geymonat · Giuseppe Montalenti

Editor: N. Bonetti.

SCIENTIA has never abandoned its programme of rigorous scientific synthesis; it aims at going beyond rather than refuting disciplinary specialization.

The motivations behind this approach can be explained today on the one hand through the formation of new areas of scientific research, and on the other through the lively evolution of those social frameworks which are at one and the same time both cause and effect of such research.

Scientia takes on the task it has itself with the help of contributions from scientists and philosophers from all parts of the world.

Publication: 3 volumes of approx. 400 pages each. Articles are published in the language in which they were written and in the integral English and Italian versions.

Annual subscription: Italy Lit. 22,000 - Europe Lit. 27,000 - Non-European countries \$ 44.00
Specimen copy: Italy Lit. 5,000 - Europe Lit. 5,500 - Non-European countries \$ 7.50

SCIENTIA - Via Guastalla 9 - 20122 Milano (Italy) - Telephone (02) 780.669

“LABORATORIO”

Análisis clínicos - Bacteriología - Inmunología - Parasitología
Hematología - Anatomía patológica - Química clínica

REVISTA MENSUAL

FUNDADORES:

Dr. Justo Covaleda Ortega Dr. Eduardo Suárez Peregrín

Director: G. PIEDROLA ANGULO

Redacción y Administración: Pl. Campos, 5. Ap. Correos, 193. Granada

Precio de suscripción anual: España: 2000 pesetas

Extranjero: 30 \$ o equivalencia

Correo aéreo: Sobretasa 22 \$ o »

Editada por

**CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS
(Departamento de Investigaciones Fisiológicas. Pamplona)**

**TERMINADO DE IMPRIMIR EN 27 DE NOVIEMBRE 1981
EN LOS TALLERES DE GRÁFICAS CONDAL
CLOT, 102 Y 104 - BARCELONA-26**

CONTENTS

SÁNCHEZ, J. and J. PLANAS. — Iron Absorption in the Everted Chicken Intestine	241
LÓPEZ-BAREA, J. — Mouse-Liver Glutathione Reductase: Inactivation by NADPH of Two Allelic Variants	249
FRANCO, R., E. I. CANELA and J. BOZAL. — Purine Catabolism in Rat Brain.	255
SANTIAGO, E., N. LÓPEZ-MORATALLA, M. J. LÓPEZ-ZABALZA and A. J. IRIARTE. — Effect of Physiological Electron Donors and Acceptors on F ₁ -ATPase	263
GÓMEZ-NIETO, J. and S. DURÁN-GARCÍA. — Insulin Receptor Interaction in Human Placental Plasma Membranes	269
VARGAS, A., R. MUÑOZ-CLARES, A. SÁNCHEZ-POZO and F. SÁNCHEZ-MEDINA. — Evolution of the Content of Gluconeogenic Metabolites in Rat Liver and Kidney During Exercise	277
MARCÓ, J., J. JIMÉNEZ-VARGAS and N. GUINDO. — Effect of Copulation on the Follicular Development and Ovulation in Rat	285
TOSAR, A., J. MARCÓ, I. PÉREZ-CABAÑAS and J. JIMÉNEZ-VARGAS. — Effect of Apomorphine on Reflexes of the Respiratory Airways	295
ORTEGA, R. M., J. L. REY DE VIÑAS and G. VARELA. — Cortisol Influence on Some Typical Parameters of Protein Malnutrition in Rats	303
SANTIDRÍAN, S., R. BURINI, V. R. YOUNG and H. N. MUNRO. — Effect of the Thyroid Status and Protein-Calorie Malnutrition of the Rate of Myofibrillar Protein Degradation in Mature Male Rats	309
PASARO, R., B. LOBERA, S. GONZÁLEZ-BARÓN and J. M. DELGADO-GARCÍA. — Localization of Laryngeal Muscle Motoneurons in Rat	317
LEÓN, A., J. LÓPEZ-BARNEO and J. M. DELGADO-GARCÍA. — Pontomedullar Reticular Formation Neurons with Vestibular, Eye Movement and Neck Displacement Sensitivity in the Alert Cat	323
NAVARRETE, M. H. and M. ^a L. SANZ-ZAMARRO. — Soluble Polypeptides from Root Meristems Growing at Different Temperatures	331
CASTRO, R., M. I. RUDOLPH, L. BARDISA and E. ULLOA. — Subcellular Study of Ethanol Action on Myocardium	335
SOLANO, F., J. L. IBORRA and J. A. LOZANO. — Some Limitations in the Use of the I ⁻ Method for Measuring the Peroxidase Activity from Bovine Thyroid Gland	341
RUIZ DE GALARRETA, C. M. and L. F. FANJUL. — The Effect of Starvation, Restricted Feed Intake and Refeeding on Acid Phosphatase Activity of the Hypothalamus and Frontal Cerebral Cortex of the Rat	349
BARBERO, M. C., J. ROMAY, E. RIAL, J. I. G. GURTUBAY and F. M. GOÑI. — Protein Assay of Rat Liver Mitochondria and Mitochondrial Membrane Preparations	353
SOLER, G., F. J. MATAIX and M. RUIZ-AMIL. — Arginine as Competitive Inhibitor of Arginosuccinate Synthetase from Guinea Pig Liver.	359
<i>Letters to the Editor</i>	
PELLÓN, J. R., S. M. HECHT and R. F. GÓMEZ. — Effect of Antibiotic Antitumoral Bleomycin on Nucleoid Structure: Sedimentation Studies	363
MANTECA, A., A. SOUVIRÓN, M. LABAJOS and M. MORELL. — Effect of Angiotensin II on Fluid Transport in Rat Isolated Colon in Chloride Free Medium	365
BOOK REVIEWS	367

INDICE

SÁNCHEZ, J. and J. PLANAS. — Iron Absorption in the Everted Chicken Intestine	241
LÓPEZ-BAREA, J. — Mouse-Liver Glutathione Reductase: Inactivation by NADPH of Two Allelic Variants	249
FRANCO, R., E. I. CANELA y J. BOZAL. — Catabolismo purínico en cerebro de rata	255
SANTIAGO, E., N. LÓPEZ-MORATALLA, M. J. LÓPEZ-ZABALZA and A. J. IRIARTE. Effect of Physiological Electron Donors and Acceptors on F_1 -ATPase	263
GÓMEZ-NIETO, J. and S. DURÁN-GARCÍA. — Insulin Receptor Interaction in Human Placental Plasma Membranes	269
VARGAS, A., R. MUÑOZ-CLARES, A. SÁNCHEZ-Pozo y F. SÁNCHEZ-MEDINA. Evolución de la concentración de los metabolitos gluconeogénicos en hígado y riñón de rata a lo largo del ejercicio	277
MARCÓ, J., J. JIMÉNEZ-VARGAS y N. GUINDO. — Efecto de la copulación sobre la maduración folicular y ovulación en la rata	285
TOSAR, A., J. MARCÓ, I. PÉREZ-CABAÑAS y J. JIMÉNEZ-VARGAS. — Efecto de la apomorfina sobre reflejos de las vías respiratorias	295
ORTEGA, R. M., J. L. REY DE VIÑAS y G. VARELA. — Influencia del cortisol sobre algunos parámetros típicos de malnutrición proteica en ratas	303
SANTIDRIÁN, S., R. BURINI, V. R. YOUNG and H. N. MUNRO. — Effect of the Thyroid Status and Protein-Calorie Malnutrition on the Rate of Myofibrillar Protein Degradation in Mature Male Rats	309
PASARO, R., B. LOBERA, S. GONZÁLEZ-BARÓN y J. M. DELGADO-GARCÍA. — Localización de las motoneuronas de los músculos intrínsecos de la laringe en la rata	317
LEÓN, A., J. LÓPEZ-BARNEO y J. M. DELGADO-GARCÍA. — Neuronas de la formación reticular ponto-bulbar sensibles a los movimientos de los ojos y del cuello y a la estimulación vestibular en el gato despierto	323
NAVARRETE, M. H. and M. ^a L. SANZ-ZAMARRO. — Soluble Polypeptides from Root Meristems Growing at Different Temperatures	331
CASTRO, E., M. I. RUDOLPH, L. BARDISA y E. ULLOA. — Estudio subcelular de la acción del etanol en el miocardio	335
SOLANO, F., J. L. IBORRA and J. A. LOZANO. — Some Limitations in the Use of the I^- Method for Measuring the Peroxidase Activity from Bovine Thyroid Gland	341
RUIZ DE GALARRETA, C. M. and L. F. FANJUL. — The Effect of Starvation, Restricted Feed Intake and Refeeding on Acid Phosphatase Activity of the Hypothalamus and Frontal Cerebral Cortex of the Rat	349
BARBERO, M. C., J. ROMAY, E. RIAL, J. I. G. GURTUBAY and F. M. GOÑI. — Protein Assay of Rat Liver Mitochondria and Mitochondrial Membrane Preparations	353
SOLER, G., F. J. MATAIX and M. RUIZ-AMIL. — Arginine as Competitive Inhibitor of Arginosuccinate Synthetase from Guinea Pig Liver.	359
<i>Cartas al Editor</i>	
PELLÓN, J. R., S. M. HECHT y R. F. GÓMEZ. — Efecto del antibiótico antitumoral bleomicina en la estructura del nucleoide: estudios de sedimentación	363
MANTECA, A., A. SOUVIRÓN, M. LABAJOS y M. MORELL. — Acción de la angiotensina II sobre el transporte de fluido en colon aislado de rata en un medio sin cloruro	365
CRÍTICA DE LIBROS	367