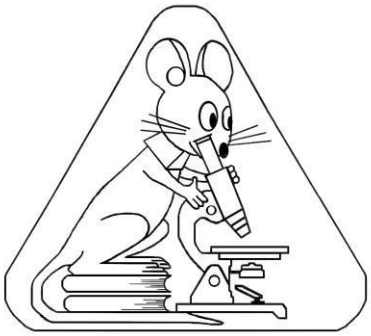


TUCUMAN BIOLOGY ASSOCIATION

(Asociación de Biología de Tucumán)

Abstracts from the

XXXIV ANNUAL SCIENTIFIC MEETING

In memoriam

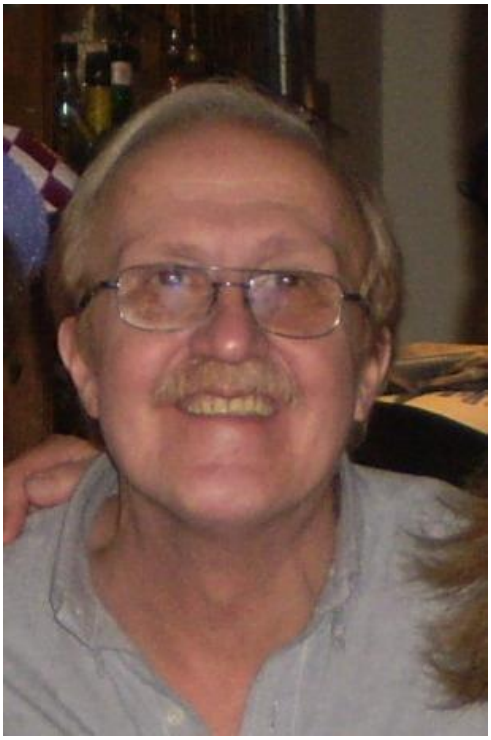
Bioch. Jorge Nelson Valz-Gianinet

October 26 – 27, 2017

Tafí del Valle, Tucumán, Argentina

The abstracts have been revised and evaluated by the Scientific Committee of the Tucumán Biology Association

OBITUARY



Biochemist Jorge Nelson Valz-Gianinet

Shortly before the beginning of the 34th Scientific Meeting, Biochemist Jorge Nelson Valz-Gianinet, a member of the Board of Directors of the Tucumán Biology Association, died in this city.

Giorgio, as he was affectionately called by friends and colleagues alike, was born in San Miguel de Tucumán on July 29, 1952. He graduated from the UNT in 1978. As a student he began to be part of the team of Researchers and Teachers of the Biology Institute of the Biochemistry, Chemistry and Pharmacy Faculty, where he later held the post of Chair Professor of Human Anatomy and Laboratory Animals.

He was a model teacher and friend, always willing to help and give advice to his students and colleagues, who will remember him fondly.

Since the beginning of the Tucumán Biology Association, he was a keen collaborator, participating in all the activities promoted by it, and being an almost permanent member on its Board of Directors.

His willingness and dedication to his work as well as his commitment to our Association earned him our love and respect and those of everyone who had the privilege to know him and be in touch with him.

two wounds, one in the lower gingiva, in the position of the 2nd and 3rd incisors on the left side where a myiasis was developed and exhibited the root of the second incisor, and another chronic wound located in the interdigital space of the left hind limb, product of a mycosis aggravated by a deep myiasis. The treatment consisted in deep cleaning with hydrogen peroxide applied with pressure in the affected area using a syringe, disinfection with 5% iodopovidone and extraction of all worms. Two daily applications of SHPM were performed locally during the first week of treatment and then continued to be applied only once a week until complete healing was observed. We achieved an efficiency of 100% with SHPM for the treatment of oral and dermal wounds. SHPM is a promising alternative as a cicatrizant and antifungal to treat wounds in animal production.

A28
EVALUATION OF DIETS WITH DIFFERENT SOY RATIONS OF SERVICE HEIFERS

García DC[1-2]; Martin AA[3]; Vella MA[2]; Peña M[2], Luján EE[2], Nasca JA[3]; Roldán-Olarte M[1-2]
[1]INSIBIO-CONICET-[2]UNT. Chacabuco 461 (4000). S.M. of Tucumán. [3]INTA-IIACS, Chañar Pozo s/n (4113). Leales, Tucumán.
E-mail: dani.c.garcia@gmail.com

Livestock rearing is one of the most important activities in Argentina and it is essential to control the cattle feeding at different growth stages. In order to determine the effect of soy on the nutrition of heifers managed for service, 34 *braford* females from INTA-IIACS were used. Two groups of animals were fed for six months with the following diets, BS: low soy content (0.3% based on live weight, LW) and AS: high soy content (0.8% based on LW). For four months, during the management for service period, the BS group was fed without addition of soy in the diet, according to Rhodes grass pasture, while the AS group was fed with 0.6% of soy based on LW and grazing. Productive parameters were evaluated monthly: LW and average daily gain (ADG) and hematological: hematocrit and leukocyte formula. During service, the % of pregnancy of both groups was registered by rectal examination. There were no changes in the parameters evaluated between the animals before the service. During service, the heifers in the AS group showed an increase in the ADG and hematocrit values, while in the BS group lower increases in these parameters were registered. There were no significant changes in leukocyte formulas. It should be noted that despite the differences observed, the females in both groups had a 100% of pregnancy. The data obtained from ADG and hematocrit indicate that supplementation with high soy rations favors the nutritional status of the animals without affecting their reproductive parameters.

A29
EFFECT OF THE COMPOSITION OF PROBIOTIC BACTERIA CULTURE MEDIUM ON THEIR CAPACITY TO ADHERE TO INTESTINAL EPITHELIAL CELLS OF POULTRY

Bertani MS[1]; López Rizo MC[1]; Quiroga M[2]; Garro MS[1]; Perez Chaia A[1,2]
[1]CERELA-CONICET. Chacabuco 145.Tucumán.[2]Fac. de Bioq., Qca. y Fcia. UNT. Ayacucho 471. 4000. Tucumán. Argentina.
E-mail: mbertani@cerela.org.ar

The use of probiotics in animal production offers a natural alternative to antibiotic suplementation as growth promoters. The efficiency of probiotics depends on the production and preservation technologies applied as well as on their ability to persist in the gastrointestinal tract. The adhesion to intestinal epithelial cells (IEC) plays a vital role in their persistence, but it may be affected by factors that modify superficial structures. Thus, the aim of this work was to study the development of probiotic poultry strains on different culture media and assess the influence of such media components on their capacity to adhere to IEC of BB chicks. Towards this end, probiotic strains *Enterococcus faecium* LET301, *Lactobacillus salivarius* LET201 and *L. reuteri* LET210 were grown at 37ºC in both conventional culture media and a specifically designed medium containing local industries by-products (yeast cream, cane molasse, whey), and adjusted to 1 x 10^8 CFU/ml. IEC were obtained from ileum of fourteen-day-old broilers and their concentration was adjusted to 5 x 10^5cells/ml. The IEC were incubated with the bacterial suspensions and the adhesion percentage and index were determined by microscopy. *E. faecium* LET301 and *L. reuteri* LET210 showed higher adhesion to IEC than *L. salivarius* LET201 in all the studied conditions. These results demonstrate that the evaluated by-products did not significantly affect the adhesion of the probiotic strains. Thus, this medium can be successfully used as an economic alternative for the development of poultry probiotics.

A30
NUTRITIONAL ASSESSMENT OF NON-TRADITIONAL RAW MATERIALS AND THEIR USE AS A FOOD SUPPLEMENT

Blanco MJ; Marchetti C; Rodríguez Brito A
Faculty of Agronomy and Zootechny. UNT. Florentino Ameghino s/n. El Manantial. Tucumán. E-mail: mjv_blanco@hotmail.com

Food is one of the most important factors that affect the production costs of pig producers since it represents approximately 75% of such costs. This impact affects the profitability of the pig establishment, especially in small producers. Diets can be formulated with alternative