#### 61.

# SALIVARY PROTEIN PROFILE IN PATIENTS WITH XEROSTOMY

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The Sjögren Syndrome (SS) is an autoimmune disease with lymphocyte infiltrate that affects the exocrine glandular tissue, with the loss of secretions. Salivary proteins play an important rol in the protection of the buccal cavity. The aim of this work is to analyze salivary proteins in patients with SS. 20 SS patients and a control group of 15 were selected. Saliva was stimulated. Physical properties, pH, flow rate, proteins, secretory immunoglobulin (Ig) A, peroxidase, alkaline and acid fosfatase, hydroxyproline, collagenase and SDS PAGE were determined. Statistically significant differences were observed for salivary proteins which, as peroxidases and acid fosfatase were diminished, while secretory A, alkaline fosfatase, hydroxyproline and collagenases were increased. By SDS PAGE a high number of protein bands of low molecular weight was observed. In SS patients, the functional affection of salivary glands can be markedly evidenced besides the diminished salivary flow rate by means of alteration of the protein profiles which are associated with the protection and defense functions. Secretory Ig A would increase accompanying to the limphocyte infiltrate. It would be important to analyze the influence of such parameters on buccal health of SS patients.

#### 62.

### ASSOCIATION OF BIOCHEMICAL VARIABLES IN SOLU-TIONS OF ENDODONTIC USE

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The chemical action of different irrigation solutions during the endodontic treatment of teeth with (V) and without (N) pulpar vitality is studied. The used solutions are: NaClO, EDTA, Ca(OH)2 and chlorhexidine (CLX). In a previous work total proteins (TP), hydroxyproline (Hyp), calcium, phosphor (P) and pH of samples extracted of root canals of V and N teeth irrigated with the solutions were determined. In this work the action of the solutions is statistically analyzed. The Exploratory Dates Analysis (EDA) to determine normality of variables and the Correlation of Pearson are applied. High significant (p<0.005) and direct (r=0.619) correlation is observed between TP and Hyp and between Hyp and P (p<0.001, r=0.726) in both teeth with NaClO. EDTA showed correlation among these variables for N teeth (p<0.001, r=0.545). With Ca(OH)2 a high and direct correlation is observed (p<0.001, r=0.883) between TP and P in V teeth. CLX showed correlation of small and direct level between TP and Hyp (p<0.01, r=0.478) and between TP and P (p<0.01, r=0.538) in V teeth. Statistics denote an important effect of NaClO on the organic and inorganic tissue in V and N teeth. EDTA produces a smaller affection in both teeth, mainly on the inorganic content. Ca(OH)2 has a higher action on the partially mineralized organic portion of V teeth and CLX mainly acts on N teeth.

#### 63.

## **USE OF FITASA IN FOWL FEEDING**

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Most of the phosphor present in plant components exists as Fitic Acid, mixed with Potassium, Magnesium and Calcium salts. Primal components from plants provide 60-75% of P with Fitatoes, a component which endogenous enzymes of birds cannot degrade. Thus, diets are reinforced with mineral supplements (bicalcic phosphate), rich in absorbable calcium and phosphor. In order to improve the use of fitic phosphor in cereals, and to lower pollution by phosphor in water and soil, it was decided to add fitasas to reproductive birds diets. Low levels of absorbable phosphor increase dead animal percentage, reduce production, weight and eggshell quality, lowers incubability and increases broken egg percentage. Diet #1 had 0.5791% total P, 5.8717 Ca: P, 240g/TN (600 FTU) fitasas. Diet #2 had .7363% P, 4.6175 Ca: P, and no fitasas. Both had 3.4% Ca and 0.38% P. Tests included descriptive statistics and mean value matching with p<0.05. Results proved that Fitasa treatments with 21.35% total P reduction increased 3.1% food consumption and 0.06% mortality, and reduced broken eggshells by 0.165%, added mineral P and feeding cost. Increased mortality might be due to more food ingesting.

## 64.

## THERMAL REQUIREMENTS FOR Solanum nigrum L. (Solanáceas) GERMINATION

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*Solanum nigrum* is a weed spread along the agricultural area of Tucumán, where it affects several crops of regional importance. It is an annual or biannual herb. Its reproduction is exclusively through seeds and it produces a large amount of them. One plant can generate up to 178.000 seeds.

This work's objective is to obtain data of thermal requirements for the germination of *Solanum nigrum*.

The experiences were carried out with fresh seeds and conserved seeds. Tests were performed outdoor, in greenhouse and in laboratory. Germination percentage, germination temperature range, and germination time was evaluated. Out of the total of seeds, it was observed that the germination percentages were 0,2% in plant pots filled with earth, and between 6% and 10% in Petri boxes. The best temperature of germination is 30°C. Temperatures below 25°C and above 35°C are inhibitory for the process. Germination velocity varies from a range of 10 days up to 18 months. The field germination percentage is very low but it is compensated with the great production of seeds per plant, this assures the emergency peaks. Optimum temperatures take place in the spring-summery cycle, assuring a continuous emergency flow from the soil bank of seeds during the cycle. During the emergency flow abundance peaks will be produced due to the specie's characteristics.