

Hrvatsko biološko društvo 1885 SOCIETAS BIOLOGORUM CROATICA 1885 Croatian Biological Society

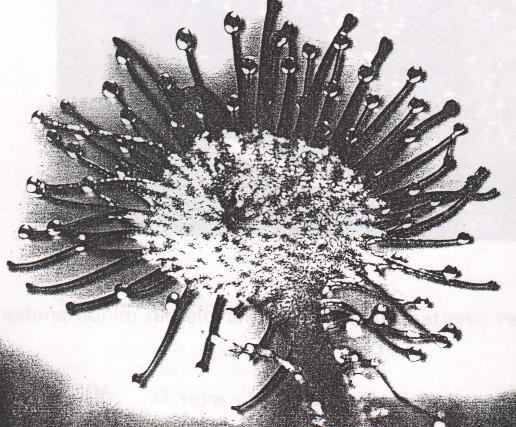
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PROCEEDING OF ABSTRACTS

organisms from infectious materials. But, selenite broth was not sufficiently toxic to inhibit fecal coli forms bacteria completely, and after 18 hours these bacteria increased rapidly and suppress Salmonella spp. Physiologically, the concentration of bile in the gall bladder is several times higher than in the intestinal lumina, and epidemiologically the Salmonella spp. lodge in the gall bladder. Sulphanilamide inhibited growth by inhibiting PABA metabolism and synthesis folic acid among the bacteria's. The object of this study is to modification the original selenite broth formula, elaborate more selective broth media, synergistically anti-metabolism effect of the sulphonamide, bile salts and agar inhibited bacterial contaminants of specimens, whereas they did not affect the growth of Salmonellae spp. If we used pre-enrichment selenite broth, the author wants to suggest to adding selective supplements "Sigma": sulfanilamide (S-9251) 0,8g/L and bile acid-oxidized (B-8256) 0,2g/L. The best results were realized with add 3,5g/L agar (salmonella-motility procedure). This medium showed a high specificity and sensitivity when compared with selenite broth, in microbiological testing stools from 1992. to 2003. in clinical microbiological laboratory (Zagreb University Hospital).

P-29
RESISTANCE OF SOME ORIENTAL TOBACCOS TO TOBACCOMOSAIC
VIRUS (TMV)

P. Tashkoski, B. Gveroska, M. Dimitrieski and G. Miceska Tobacco Institute-Prilep, Prilep, Republic of Macedonia

The virus mosaic of tobacco (Tobacco mosaic virus) is a very stable virus, which stability remains in fermented tobacco many months and years and the smokers in the field can transver the virus to tobacco with touch. Its transfer is easy with mechanical way over cultural practise in tobacco production and the yield of tobacco can be decreased with 30-35%. Infected tobacco leaves have bad quality and the low taste characteristics. Having in mind the biological significance of concept resistance/tolerance, selection and introducing resistant varieties against this virus is contemporary measure in the Integrated control of tobacco. The aim of this investigation is the examination resistance of some domestic and foreign varieties obtained with generative intraspecies hybdizations between foreign resistant and domestic nonresistant tobacco varieties. Inoculation of tobacco plants is made using method of Terenovskiñ (1965), cit. Tran~eva (1995) and the estimations of resistance is made by visually, based on shown symptoms of disease. All varieties where there were not find neither one infected plant were determined as resistant and the varieties with infected plants were determined as sensitive, without

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percentage of infection. Investigations were made in 2005 in Tobacco Institute - Prilep in field conditions, including some new varieties and lines of the types Prilep and Yaka and varieties P 12-2/1 and Yv 125/3 as a standard. Harvested and non-harvested plants were used and two estimations were made on the occurrence of symptoms of the virus in leaves and suckers. Disease intensity on the first estimation in standard varieties P 12-2/1 was 30.17% and 8.18% in harvested and non-harvested plants, respectively, while in Yv 125/3 it was 54.80% and 3.20% in harvested and non-harvested plants, respectively. On the second estimation, disease intensity in P 12-2/1 was 31.03% and 9.09% in harvested and non-harvested plants, respectively, while in Yv 125/3 it was 72.11% and 4.80% in harvested and non-harvested plants, respectively. In both estimations, varieties P 11-46/65, P 301DH and P301/N of the type Prilep, and MB 123-82/1 and Yaka 123/7, Yaka 65-81/1, Yaka 301/23 of the type Yaka developed no symptoms of the disease, i.e. in field conditions they revealed complete resistance to TMV. The fact the higher percentage of disease in the variant harvested plants is a confirmation for easy transfer of virus over mechanical way. We estimate that the varieties with resistance to TMV will have application in tobacco production in the future.

P-30 USE OF DIFFUSER "DALMACIJA+40%" FOR NITRIFICATION OF SYNTHETIC WASTEWATER

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The method of biological removal of the organic compounds from the wastewater is based on the laws of the aerobic degradation-biological oxidation. The organic maters present in the wastewater are often soluble in water, like the carbohydrates, amino acids, alcohols, and often they cannot be soluble in water, like: starch, celluloses, lipids that can create one complex substrate, which is used by the heterotrophic microorganisms as an food and energy source. With the help of these microorganisms the processes of biological wastewater treatment are being conducted. As a result from the co-metabolism, the microorganisms can use different kinds of organic