## **SUMMARY**

EFFICIENCY OF THREE MINERAL BROTHS IN THE CONTROL OF THE OILY STAIN (*Xanthomonas campestris*) ANTRACNOSIS (*Colletotrichum gloeosporioides*) AND IT STAINS EYE OF CHICKEN (*Phomopsis ssp.*) IN MARACUYA (*Passiflora edulis*) IN SACRED SUNDAY OF THE TSACHILAS.

The increment of the illnesses caused for (*Phomopsis ssp., Xanthomonas campestris, Colletotrichum gloeosporioides*), it has taken to the indiscriminate use of pesticidas, causing damages to the human health for the applications and residuals of these in the fruits particularly in maracuyá.

He/she was carried out the present investigation in Sacred Domingo of the Tsáchilas in the years 2006 - 2007.

3 fungicides of mineral origin were evaluated, two of synthetic origin as chemical witness and an absolute witness with a total of 5 treatments: T1 = Broth embroiders them (copper Sulfate + hidroxido of lime); T2 = Broth visosa (copper Sulfate + I oxidize of lime + sulfate of magnesium + sulfate of zinc + boric acid); T3 Broth sulfocálcico (it Sulfurates + hidroxido of lime); T4 alternate Phyton with Score® (Sulfate of copper pentahidratado, Difeniconazol); T5 (without control).

You uses the Design of Complete Blocks at random, with 4 repetitions and functional analysis by means of the test of Tukey. The experimental units were conformed by 3 espalderas located at a distance of 2.70m, each espaldera he/she had 4 plants at 3m, in total each experimental unit occupied a surface of 97.2m² and it was conformed by 12 plants

The frequency of application of the mineral broths was of 15 days in dose; T1 Broth embroiders them 20g/l; T2 Broth sulfocálcico 30g/l; T3 broth visosa 48g/l synthetic fungicides every 20 days they were applied in dose; Phyton 1.25cc/l and Score 0.5cc/l

You analyzes the incidence and severity of the illnesses in the foliage and in the fruits, efficiency of the treatments, yield and economic analysis.

You concludes that the broth embroiders them it presented the biggest efficiency in the control of Phomopsis spp., compared with the synthetic fungicides Phyton® - Score® (alternate application) and the broths visosa and sulfocálcico.

The fungicidal Phyton® - Score®, but efficient in control of Xanthomonas campestris and *Colletotrichum gloeosporioides*, present in the maracuyá fruits.

In the evaluated treatments an inverse proportional relationship existed between the illness percentage and development, growth, fructificación of the plant affecting the illnesses to the yield

The fungicidal broth embroiders them it promoted bigger yield, smaller investment cost and bigger rate of marginal return, continued by the fungicides of synthetic origin Phyton® and Score® alternate application.

It is recommended to carry out broth applications embroiders them, in the development phases and growth of the maracuyá plants until the beginning of the fructificación, of there from now on to alternate the applications depending on the incidence, with synthetic products as Score®, to reduce damages for Xanthomonas campestris and *Colletotrichum gloeosporioides* in fruits.

To evaluate the efficiency, of the broth embroiders them in the control of *Fusarium oxisporum* present in mature plantations of maracuyá.