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with *Jaracatia* seeds. Solutions were prepared with the following concentrations: control treatment dose zero; 1; 2; 4; 6 and 8 g of chlorothalonil per kg of seed. The microorganisms found in the control treatment were: *Alternaria* sp; *Aspergillus flavus*; *A. niger*; *Cladosporium* sp; *Colletotrichum* sp; *Curvularia* sp; *Epiccocum* sp; *Fusarium* sp; *Helminthosporium* sp; *Mucor* sp; *Penicillium* sp; *Periconia* sp. and *Bacterium* sp. After soaking the seeds in the chlorothalonil solutions for five minutes, even the highest concentration did not inhibit emergence of the following microorganisms: *Alternaria* sp; *Aspergillus flavus*; *Cladosporium* sp; *Colletotrichum* sp; *Mucor* sp; *Penicillium* sp; *Rhizopus* sp. and *Bacterium* sp. The fungicidal treatment had an effect on *Aspergillus niger*, *Curvularia* sp; *Epiccocum* sp; *Helminthosporium* sp, *Penicillium* sp and *Periconia* sp.

#### Abstract 49

### Onion seed production in conventional and agroecological systems

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The present work had the objective to study conventional and agroecological systems of onion seed production. For this, three proprieties of agroecological production in Candiota and Hulha Negra, Rs, were followed and two conventional were used. They were at random and six sub samples were taken from each experimental unit, each of them with two meters over the production line. The variables studied were: bulb weigh, bulb diameter, bulb number per area, number of stems per bulb, number of flowers per umbel, number of seeds per flower, seed moisture content, seed efficiency, germination, first count, weight of 1000 seeds, accelerated aging test, speed of germination, seed health. Based on the results the following conclusions were taken. The production of onion seed through agroecological system is economical possible and ecologically sustainable; the onion seeds production in conventional systems is less than 30% of his potential; we can consider that the agroecoligical and conventional production of onion seeds have similar potential and physiological quality; and the number of flowers per umbel is the main component of onion seed production.

#### Abstract 50

### Determination of the critical moisture level in seeds of *Cenostigma tocaninum* Ducke

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The legume tree *Cenostigma tocaninum* Ducke (pau-prezinho), naturally occurs in Amazonia and lately it has been used for arborization in Manaus city. However, the germination and storage seeds behaviour of *C. tocaninum* is not well known. The present study aimed to evaluate the behavior of seeds of *C. tocaninum* regarding the dehydration sensitivity. The assay was performed at the Laboratory of Seed Analysis of Embrapa Western Amazonia (Manaus/AM). Seeds were treated in the following drying systems: chamber with warmed air-forced ventilation (35°C); desiccator with silica gel; drying at room temperature (27 °C) and exposed for zero, 12, 24; 48, 72 and 96 hours. The experimental delineation was completely randomized, with four replicates and 20 seeds per treatment. The water content in the seeds, as well as the germination ability were measured at every drying interval. The germination tests were performed in a Mangelsdorf seed-germinator at 30 °C, in boxes (Gerbox ®) with paper substrate (Germitest ®). Germinated seeds were counted every two days, considering a seed germinated if the radicle reached approximately 0.5 cm length. Tests showed that the recently harvested seeds of *C. tocaninum* have an initial moisture of 23.4% and a germination ability of 93.75%. After the seeds were dried for 96 h in the warmed air-forced ventilation system, the water content was reduced to 5.8% and the germination rate remained high at 92.5%. In the other drying conditions, the decrease in water content of seeds was not significant. The germination ability of seeds of *C. tocaninum* was not affected by dehydration, having thus an orthodox behavior.