

Apyrase activity and changes in metabolites during germination and tuberization of *Solanum tuberosum*

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Levels of adenine nucleotides, inorganic phosphate, starch and apyrase were measured during the growth of *Solanum tuberosum* tuber. The data obtained from potatoes sown in summer were compared with the data already reported for tubers sown in winter. Two major differences were found between the sowings. The first leads us to conclude that tubers from the summer sowing mature 21 days before the winter one, because starch and inorganic phosphate reach constant values earlier. The second difference was found in apyrase activity, which in tubers from the summer sowing reached a maximum after 106 days, while in winter tubers its specific activity and amount increased continuously until maturity. The same types of metabolites and apyrase activity were investigated in shoot and mother tuber during germination of potatoes. In the mother tuber the amounts of metabolites and enzyme activity remain almost constant except for starch which showed a tendency to decrease at the end of the period analys