P3- Micropropagation of different pear rootstocks

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Pear (*Pyrus communis* L.) is one of the most important temperate fruit crops. Uruguay aims at producing pears of high quality to reach regional markets as well as those of the North Hemisphere. Nevertheless, local climate and soil conditions generate sanitary problems to the pear production, mainly in the South of the country, where the major pear producing area is located. Recently some rootstocks of the series of Old Home x Farmingdale (OHxF) were introduced from the pear germplasm collection of the US Department of Agriculture, National Clonal Germplasm Repository–Corvallis (NCGR) to the country with the aim of evaluating new materials and trying to identify those better adapted to local soil and weather conditions. To reach a reasonable number of plants for evaluation, in the shortest possible time, in vitro multiplication system was selected. This work was carried out to develop a protocol of in vitro propagation of different rootstocks, in order to generate faster plant availability to select the best material. A group of five rootstocks from the series OHxF was selected: OHxF 40, OHxF 333, OHxF 87, OHxF 69, OHxF 217 as well as a local plant identified as 11B4. All genotypes were cultured in the same culture medium. The base medium was composed of MS (Murashige and Skoog 1962) mineral salts. The rootstocks had different behaviour, with OHxF 217 and 11B4 exhibiting the lowest multiplication rate in the culture medium used, producing less than two shoots per explant. On the contrary, the rootstock OHxF 40 had the highest rate producing more than five shoots per explant. Rootstocks showed differences in percentage of rooting and the survival during the acclimation period.

Keywords: In vitro, shoot proliferation, tissue culture, rooting, *Pyrus communis* L.