Marking of Cells with Frutalin in Benign and Malignant Breast Lesions Montenegro, C.F.<sup>1</sup>; Silva, B.T.F.<sup>2</sup>; Silva, B. B.<sup>3</sup>, Moreira, R.A.<sup>1</sup>; Monteiro-Moreira, A.CO.<sup>1</sup>

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Plant lectins has been increasingly used in the marking of cells, due to their affinity for specific carbohydrates which may lead to recognition of changes in the membranes of malignant cells. The lectin pattern of binding glycoconjugates has been well demonstrated in processes that occur during and after cell neoplastic transformation. The changes in the glycosilation pattern, during malignant transformation of several cell linages is already clear. This work intend to evaluate the interactions and binding pattern of frutalin, an alpha-Dgalactose binding lectin, in benign and malignant breast lesions and determine a possible diagnostic value. The technique of lectin-histochemistry was performed using the frutalin, with the method of biotin-streptavidin-peroxidase in fibroadenomas, sclerosing adenosis and breast cancer. Frutalin was isolated in a D-galatose-agarose column, biotinylated, and let to react with the slices prepared in syalilated glass slides. Part of the cases had a predominant weak binding and marked the stroma (half of the cases were weakly marked in all three kinds of lesions). But the cases with breast cancer showed a slight difference since they have been marked with frutalin in a more intense way and in a greater number of cases, suggesting that the galactose terminais) may be more exposed in malignant breast neoplasias. As the marking of the stroma could suggest a possible prognostic value of frutalin this issue is open to be answered by further research in future.

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