

STUDIES REGARDING CLEANER EXTRACTION TECHNIQUES USED FOR POTATO'S VIRUSES IDENTIFICATION

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The research purpose was to evaluate the effects of following modifications of ELISA (enzyme linked immunosorbent assay) technique on potato virus detection: the use of sap extracted directly from the tubers (not from the leaves) in several extraction buffers with new composition. Using McIlvain's buffer (sodium phosphate 0.18M + citric acid 0.18M; pH 7), the absorbance values (A_{405nm}) increased significantly for potato virus Y and potato virus A detection. Sodium diethyldithiocarbamate (0.01M) in phosphate-buffered saline plus Tween 20 (PBS-T) used instead of polyvinylpyrrolidone increased the sensitivity of potato virus Y detection, but these additives decrease the absorbance values in case of potato leafroll virus (PLRV) identification. The use of new cleaner methodologies and buffer solutions could save time and costs in routine diagnostic of viruses.



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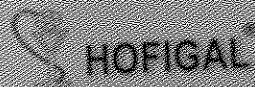
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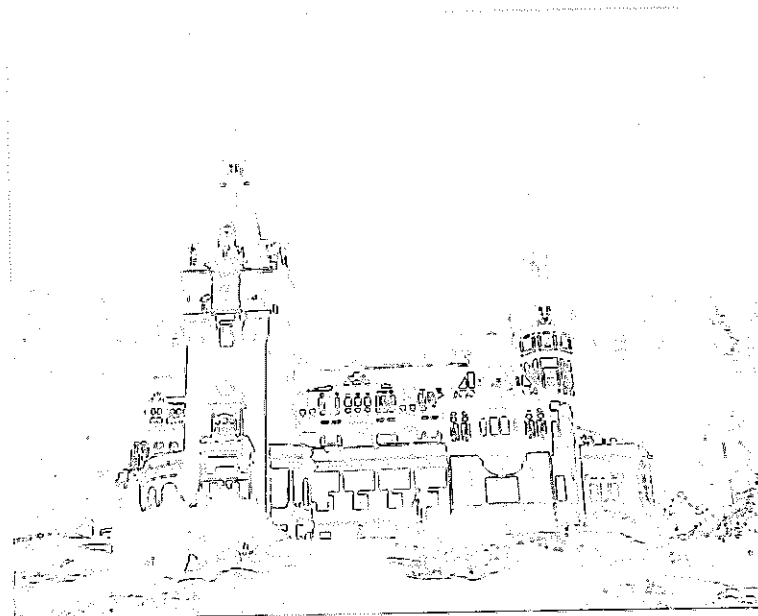
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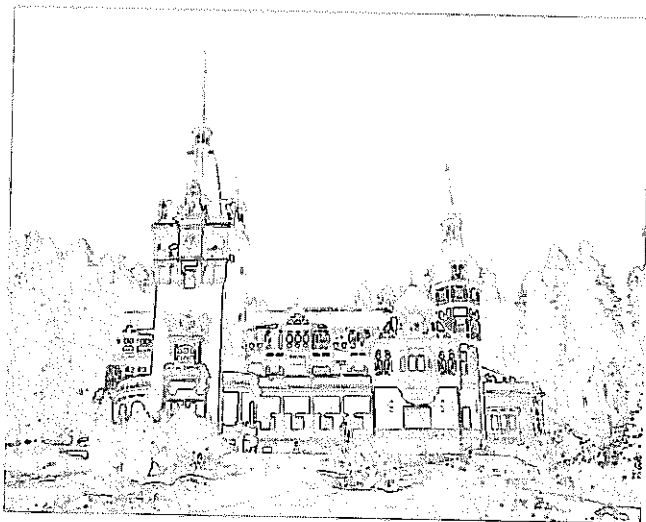


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