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203 - Certification for virus-tested plant material for Colombian exports – A Case Study on Purple Passion Fruit

Zertifizierung für virengetestetes Pflanzenmaterial für kolumbianische Exporte – Beispiel Passionsfrucht

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Colombia's agricultural export sector has advanced and in parallel the need for phytosanitary control has become more important. Colombian purple passion fruit (*Passiflora edulis* Sims) is in global demand. Next Generation Sequencing (NGS) has demonstrated the presence of *Soybean mosaic virus* (SMV), *Passionfruit yellow mosaic virus* (PFYMV), and a novel Ilarvirus in Colombian passion fruit growing areas. The spread of these viruses contribute to yield losses for farmers. In order to examine the frequency and distribution of these viruses in Colombia, to characterize the symptoms associated with them, and to identify the pathways for their transmission, ELISA and RT-PCR based detection of the viruses was established. Samples were collected in Cundinamarca and Boyaca, Colombia. Using molecular and serological tools for virus-testing, it was considered if and how a similar diagnostic package could be adopted for other important Colombian staple crops, in the framework of a large cooperation project between German and Colombian universities, the Colombian Agricultural Institute (ICA), the Colombian Corporation of Agricultural Investigation (CORPOICA), and the International Center for Tropical Agriculture (CIAT). The competitiveness of Colombian products in domestic and international markets depends on the use of healthy plant material and virus-tested certification can improve quantity and quality of yields.