Title: 3007- Proposal for an early identification key of Actinidia species and plant gender using leaf pubescence

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Abstract body text:
Since 1993, at the Faculty of Horticulture within the USAMV Bucharest, a kiwifruit breeding program started with the purpose to select some valuable hybrid genotypes obtained through intra and interspecific crossovers. During the selection process, different genotypes showed different morphological features that have been used for their characterization. For an easier identification of the species influence on hybrids morphology and hybrids gender, we tried to create an identification key using leaf pubescence. Leica S8 APO Stereo Microscope with Leica DFC 295 Camera and Lascore Soft were used to analyze the leaf surface morphology. Several observations and measurements as number of ramifications per stellate hair, stellate hairs density, expressed as average number of stellate hairs per square millimeter, average length of a stellate hair ramifications, were done. Based on our own research related to the morphology and some measurable parameters of the stellate hair that forms the leaf pubescence in kiwifruit plants (Actinidia sp.), it is possible to determine the plants species and gender. This research has a particular practical importance in the selection of kiwifruit hybrids in the genetic breeding process in order to characterize and identify the new genotypes. Further observations regarding leaf pubescence morphology of different Actinidia species are needed to be extended in different weather conditions and areas.