



## Coordinated developement of the architecture of the primary shoot in bush rose

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Résumé en anglais

The development of the architecture of ornamental bushes needs to be explicitly described because it defines both their visual appearance and their interface with the environment. The aim of this work was to describe the dynamics of organ development in the primary shoot of rose bushes and their coordination. *Rosa hybrida* L. 'Radrazz' was grown in a glasshouse in two seasons. Internodes and leaflets were measured frequently and elongation curves were fitted to a linear-plateau model. The number of leaflets per leaf displayed clear patterns of organization along the shoot. Allometric relationships linked all leaf dimensions to terminal leaflet length. The differences in internode length between successive phytomers resulted from differences in the extension rate and the duration of extension. Conversely, the differences in the terminal leaflet size resulted almost solely from differences in extension rate. Internodes and terminal leaflets extensions were closely coordinated. This work provides the basic elements for establishing a virtual plant model.

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