Different harvest stages and longevity of floral stems of Canadian goldenrod (*Solidago canadensis* L.)

P.G. Sá, D.B. Almeida, C.M.L. Alves, J.G. Barbosa, J.A.S. Grossi, A.S. Zandonadi, M.A. Muniz

Acta Horticulturae 1060: 225-228. (2015)

Abstract

Canadian goldenrod, a plant of the *Asteraceae* family, has branched inflorescences with numerous small green capitula when closed, which become yellow during the opening. During the flowering, different stages of stem development are found in the same plant with occurrences of branches on the stem with capitula in different degrees of physiological maturity. It naturally constitutes the strategy of survival but in commercial production, it may impair the harvest of all stems at the same time, which increases production costs. In this context, the objective of this study was to observe the stages of postharvest flower development, to determine the optimal harvest stage to goldenrod stems and to evaluate longevity. The stems used in this experiment were classified in different stages as follows: Stage 1 – green and individualized capitula; Stage 2 – the capitula begin to change color; Stage 3 – the capitula is yellow bland with central opening; Stage 4 – the capitula are yellow gold, with brazed petals; Stage 5 – the capitula are yellow gold, the petals begin to open; Stage 6 – the capitula are semi-open in the first 2 cm of the main apex; Stage 7 – the capitula are open in the first 2 cm of the main apex and lateral apexes. The flowers of goldenrod stems harvested in stages 1, 2, 3 and 4 displayed irregular opening, whereas 1 and 2 can be used as foliage. Flower opening in the stems at stages 5, 6 and 7 were regular and had similar postharvest longevities, indicating that the harvest of stems of goldenrod can be performed from stage 5.