



Field Pennycress Production and Growth Staging Guide

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Abstract: When searching for information on field pennycress, the majority of findings are of the management and characteristics of weedy varieties and there are few cumulative sources on its use as a crop. Through reviewing the scientific literature available on pennycress as crop and as weed, an initial outline was formed. It was further improved upon through discussion with experts, more targeted literature searches, and through taking photos of the developmental process. After compiling the current understanding of crop production practices, a succinct production guide and a growth staging guide were developed. The production guide describes the current recommended agronomic practices in the Ohio region, including planting and harvest dates, seeding rate considerations, and current knowledge on nitrogen requirements and potential pest issues. The growth staging guide was developed based on the Biologische Bundesanstalt, Bundessortenamt and Chemical industry's extended growth stages (BBCH). Our growth staging guide aligns the crop's phenotypic progression to the standardized scale and correlates the growth stages to management processes on a timeline for the Ohio region. The production guide and staging guide will serve as the tools for producers and researchers to clearly communicate and as foundation to be revised as additional recommendations for this crop are developed.