基于位置特征的行间杂草识别方法

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摘　要：　研究了利用条播作物的位置特征识别行间杂草的方法。根据条播作物成行排列的位置特征，利用像素位置直方图法识别作物中心行。根据多数杂草位于作物行之间裸土中的位置特征，以每条作物行左右边界线段的起始点作为种子，运用种子填充算法填充与其相连通的作物行区域，从而识别行间杂草。试验表明：行间杂草的准确识别率平均为80％，错误识别率平均为4.2％，适用于早期作物田间杂草识别。 A between-row weed detection method using the position feature of drilled crop was developed in this paper. The drilled crop was regularly sown as a row space, and the method of pixel lateral histogram was used to extract the centre of the crop row. Because most weed was distributed on the bare-soil zone of the crop rows, between-row weed was detected by the seed fill algorithm, which could fill the crop areas connecting with the left and right borders of each crop row. And the start point of each crop row border was set as the seed point. The experimental results showed that the mean correct classification rate of between row weed was 80%, and the mean mistake classification rate was 4.2%.

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