

The present invention relates to the use of phenylpyrimidines of formula (I) or their agriculturally acceptable salts or derivatives as herbicides, wherein the variables are defined according to the description, specific phenylpyrimidines of formula (I), processes and intermediates for preparing the phenylpyrimidines of the formula (I), compositions comprising them and their use as herbicides, i.e. for controlling harmful plants, and also a method for controlling unwanted vegetation which comprises allowing a herbicidal effective amount of at least one phenylpyrimidine of the formula (I) to act on plants, their seed and/or their habitat.