# O.29 - Oilseed rape weed integrated management: concern of mechanical weed control

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Oilseed rape weed control is based on pre-planting herbicide (trifluraline) whose efficacy is well known for control of weed grasses and for increased performances of many pre-emergent herbicides which destroy broad leaf weeds ( *Papaver rhoeas, Galium aparine, Fumaria officinalis, Geranium sp., Veronica sp, etc.*). Only a few post-emergent molecules are available for broad leaf weed control and require high costs and short and restricting periods. The integrated weed management approach refers to a combination of direct and indirect methods in order to limit chemical applications, especially systematic pre-emergent herbicides. In oilseed rape, mechanical weed control can be an alternative or a complement to herbicides and should take progressively a larger place in the direct weed control options, taking account of the restrictive policy on the use of chemicals. Two main motivations could lead farmers to adopt mechanical control: saving herbicide costs and complementing or partly replacing chemical weed control. Several farmers interviewed also expressed fears about crop damage, the high sensitivity to the climate and the workforce these techniques require. CETIOM launched a research program to assess, in different backgrounds, the selectivity and the efficacy of three tools, alone or combined with herbicides: the rotary hoe, the tine weeder and the in-row hoe. Decision grids have been designed to guide farmers in the use of these tools, according to their adjustments, the stage of the crop and the weeds, the soil texture and moisture, etc.