

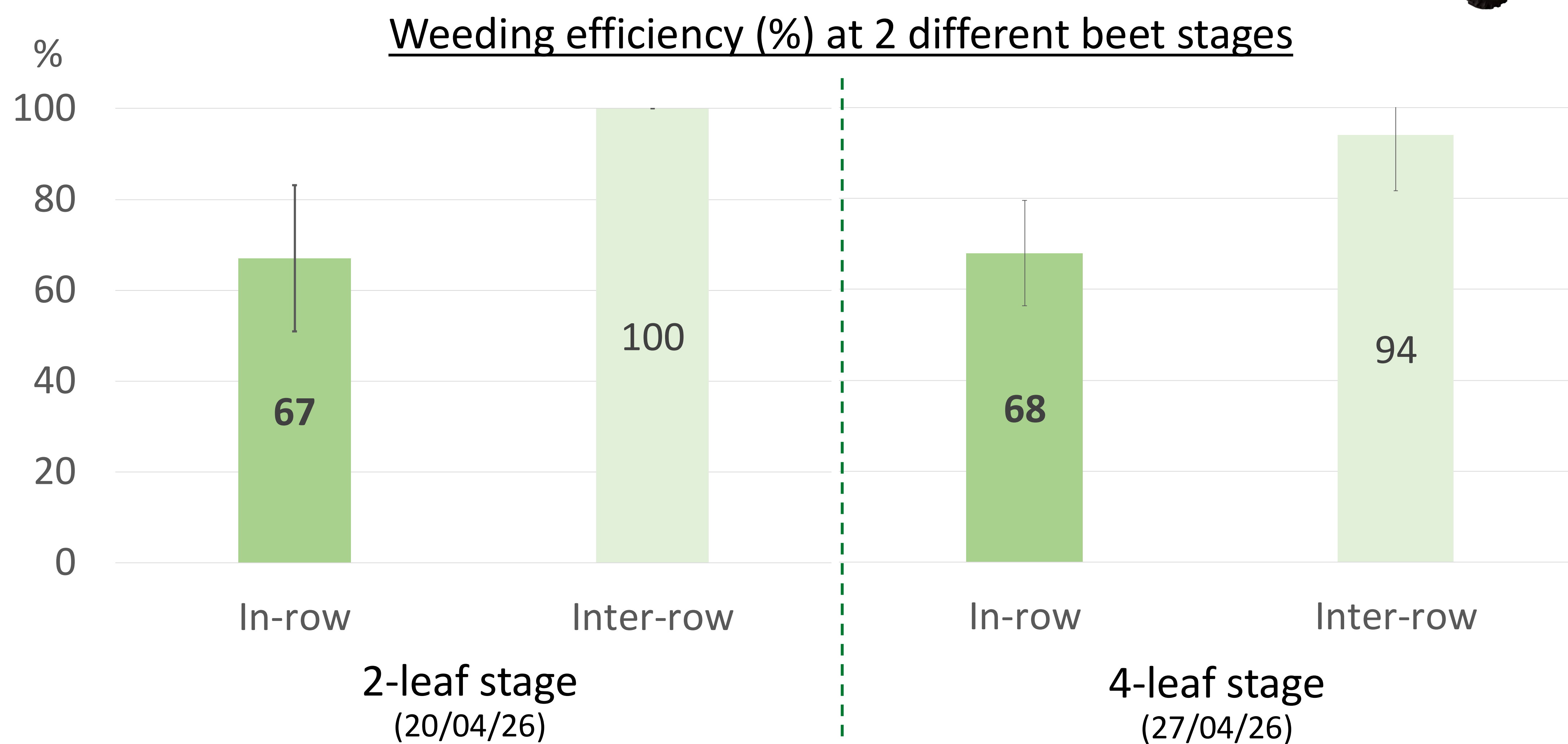


Farmdroid in organic sugar beet: technical and economic analysis

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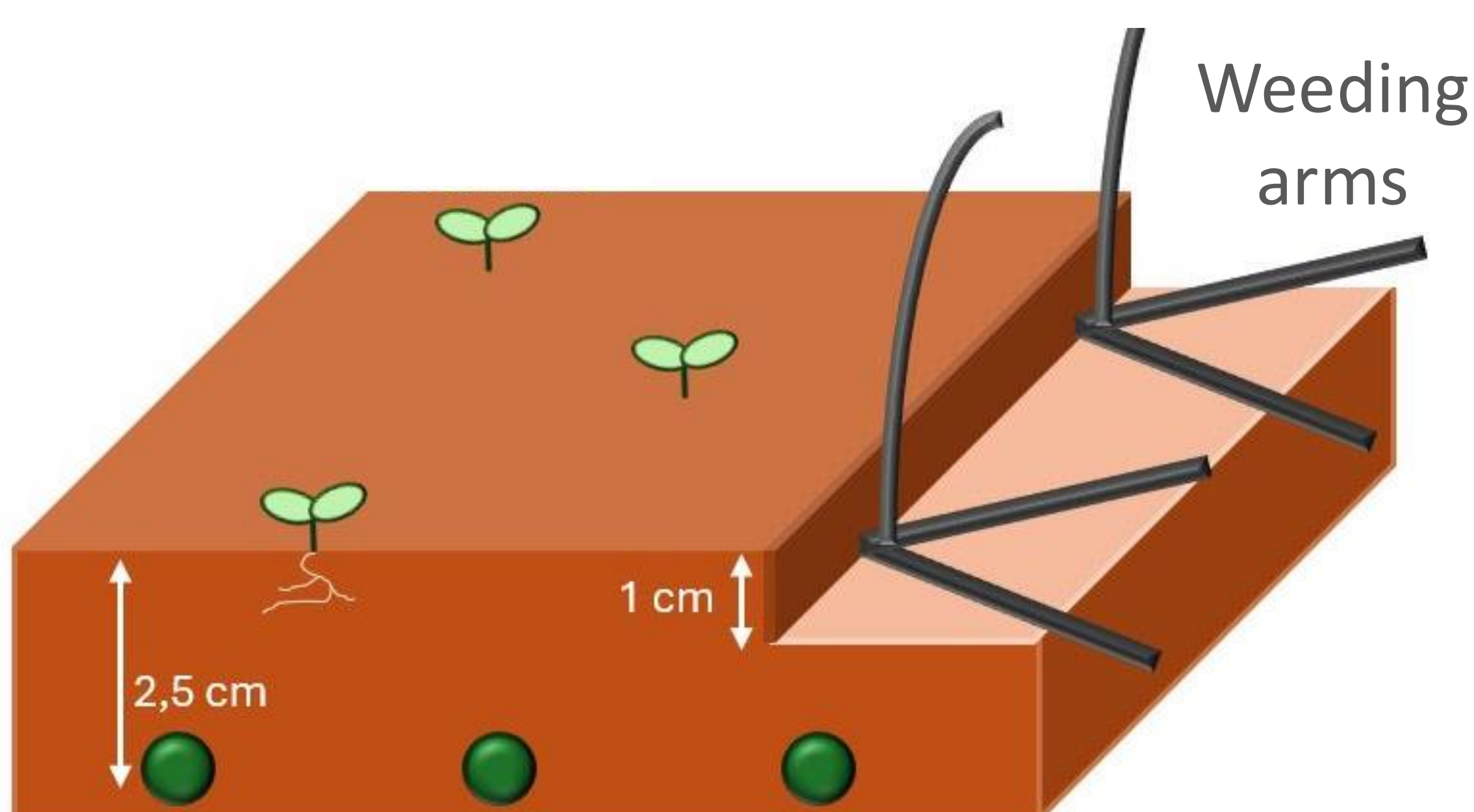
An efficient in-row weeding at early stage ?



ITB organic sugarbeet trial 2026 in Auteuil-le-Roi (50 km west of Paris)

- High efficiency in the row at beet stages **where mechanical weeding implements are destructive**
- **1/3 of in-row weeds remain** due to the in-row knife movement
- Very high efficiency in the inter-row area

Debatable effect of the blind weeding

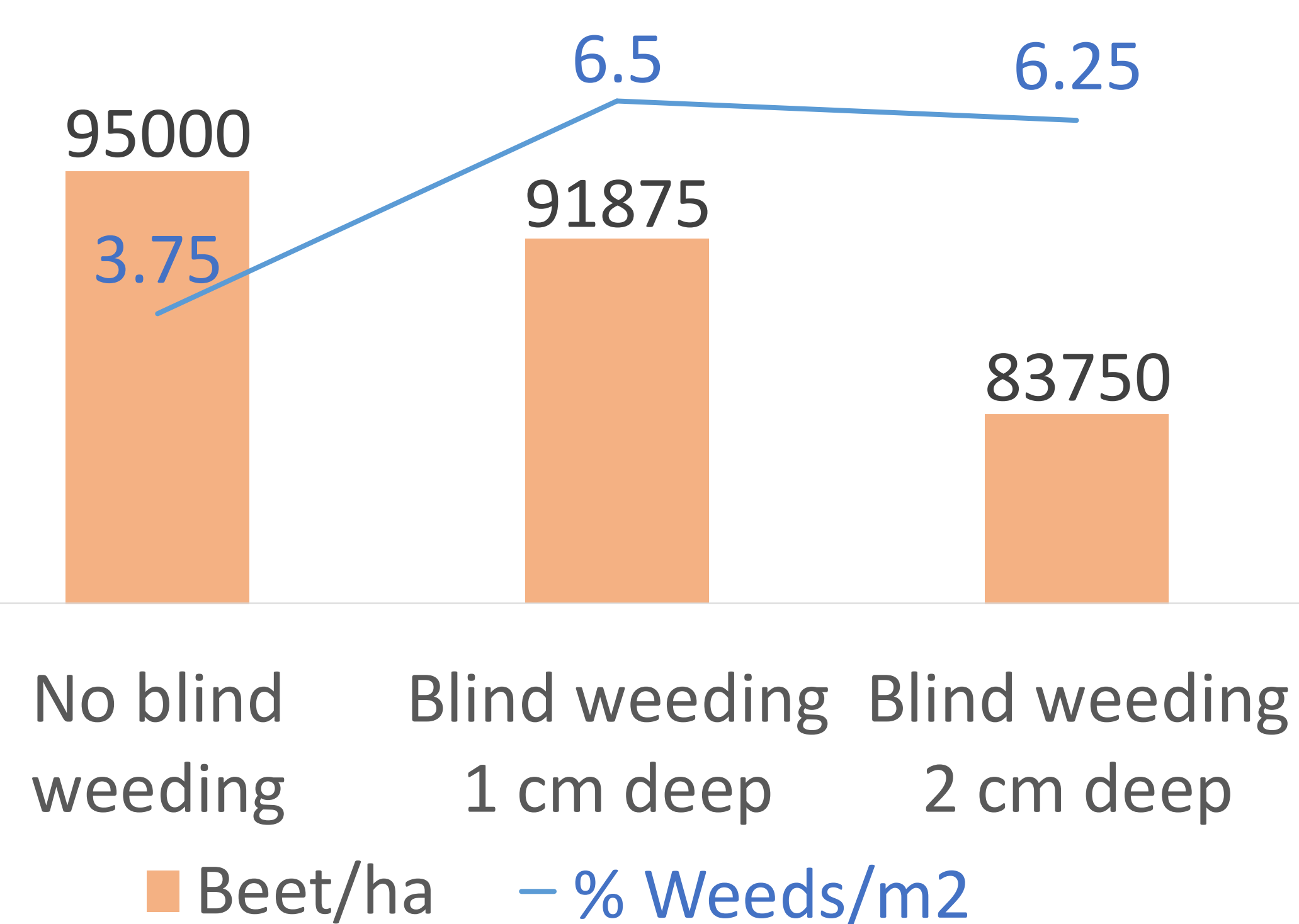


Beet seed

Principle of blind weeding

- Efficient on **very young weeds...** and under dry condition after weeding
- Superficial soil cultivation can cause **weed seeds to germinate**
- **Negative impact** on the beet population with blind deep weeding (and can move beet seeds)

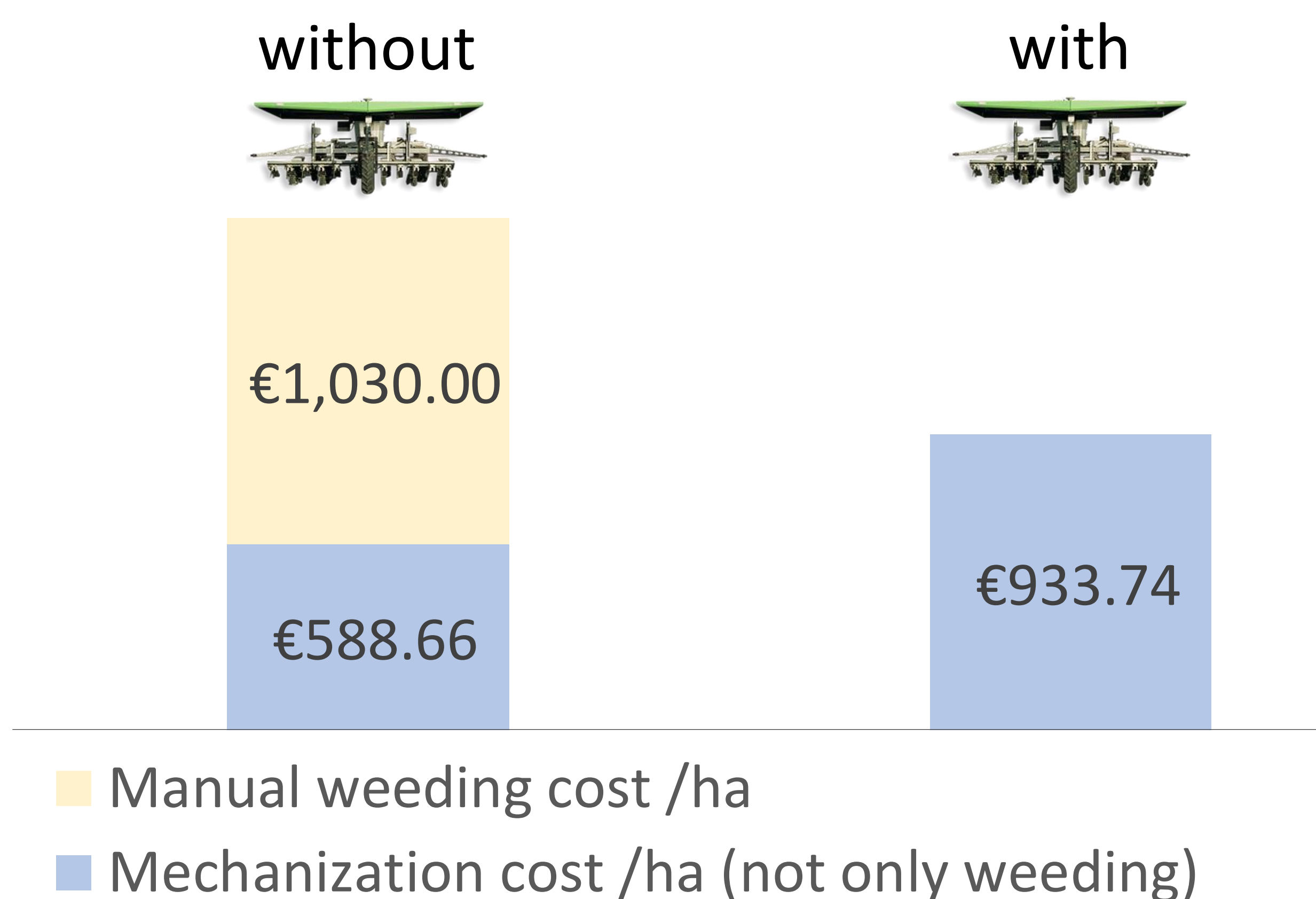
Population and weeds infestation



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The real economic benefit: manual weeding substituted by the robot

- Manual weeding (60 h/ha) is much more expensive than the cost/ha of the Farmdroid
- But in-row weeding with Farmdroid is **not as effective** as a meticulous manual weeding
- Farmdroid users significantly reduce their manual weeding time



Analysis by ARTB and ITB using Systemre®

- 52%

reduction in fuel consumption for the whole beet crop management

132.5 L/ha without Farmdroid
63.2 L/ha with Farmdroid