



Roboter zur Unkrautbekämpfung in  
Reihenkulturen  
Christian Kirchhoff  
*K.U.L.T. – Kress Umweltschonende  
Landtechnik  
GmbH, Vaihingen*



**Pioniere:**

**Tillet&Hague self propelled 1996**

<https://www.youtube.com/watch?v=fvD5klzdg4M>

**Querhacke Osnabrück 2000:**

[https://www.youtube.com/watch?v=jQsHRXnR\\_2U](https://www.youtube.com/watch?v=jQsHRXnR_2U)

**Poulsen K.U.L.T. Inrow 2007**



Poulsen 2008.MOV





# Selbstfahrende Traktoren oder Schwarmtechnik?



Van Winden ohne Fahrer <https://youtu.be/f9NWN4ODmII?t=51>

K.U.L.T. Poulsen Grösste Hacke?

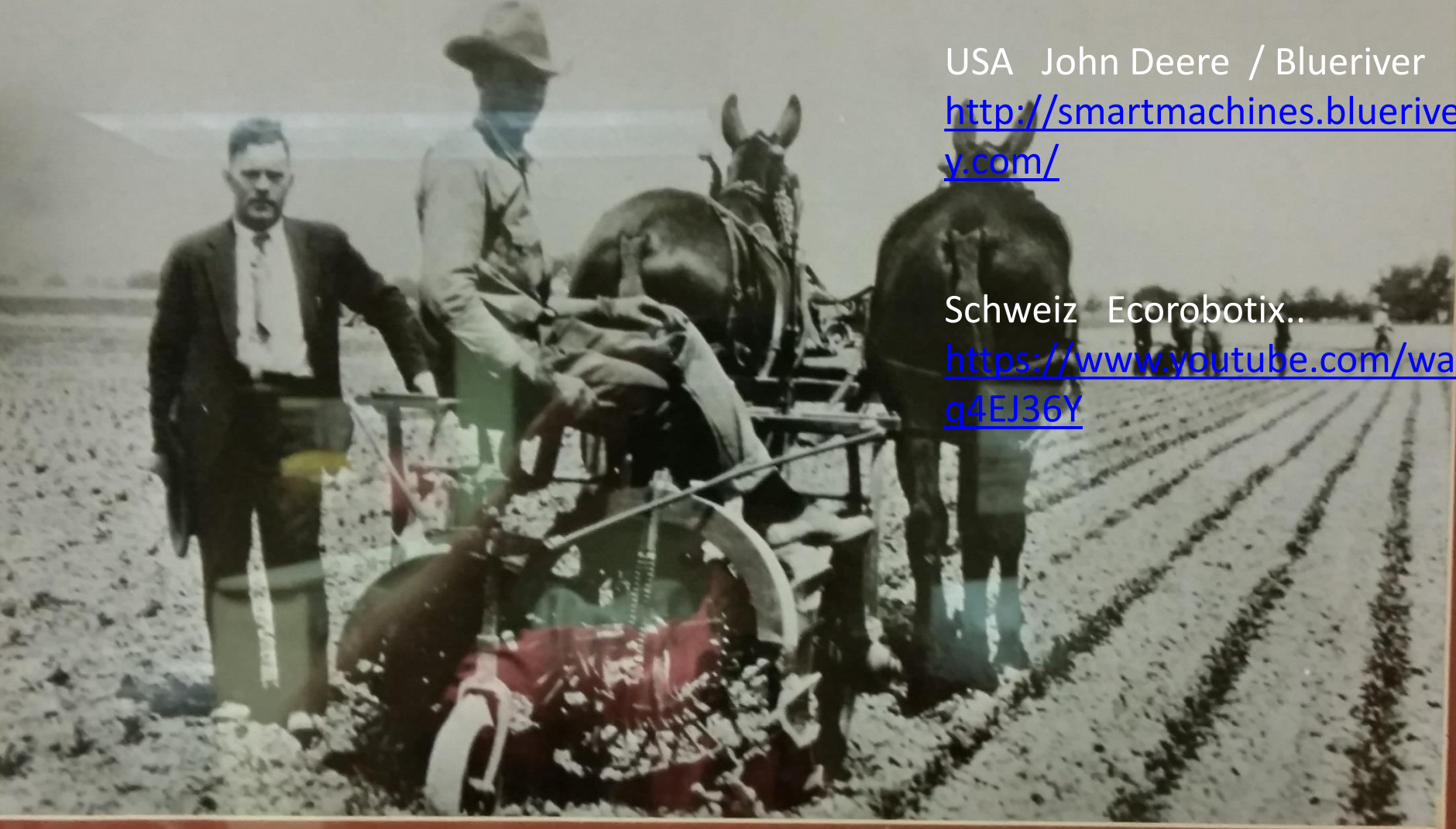
<https://www.youtube.com/watch?v=bhdeCk5PJGU>

Prescionmakers NL

<https://www.youtube.com/watch?v=OfWerw50d0Y>

Fendt Xaver <https://www.youtube.com/watch?v=T5k-Vx6WPFs>





USA John Deere / Blueriver  
<http://smartmachines.blueriver.com/>

Schweiz Ecorobotix..  
<https://www.youtube.com/watch?v=q4EJ36Y>

MULE DRAWN MECHANICAL THINNER



*Naïo Technologies*

*Producing healthy food sustainably*



*European leader in agricultural weeding robots*





*Naïo Technologies*

*Producing healthy food sustainably*

**Oz – Mechanical autonomous weeding**

*For small vegetable farmers*

*120 robots sold since 2014*

Specifications:

- Electric 4x4 engines
- 130 Kg / 290 pound
- 10 hours of autonomy
- Laser/Camera/GPS RTK guidance
- Security Certified



<https://www.youtube.com/watch?v=RbQ-ZOvK0gM>



*Naïo Technologies*

*Producing healthy food sustainably*

**Dino – Mechanical autonomous weeding**

*For large vegetable farmers*

*20 robots sold since 2017*

Specifications:

- Electric 4x4 engines
- 700 Kg / 1550 pound
- 10 hours of autonomy
- Laser/Camera/GPS RTK guidance
- Security Certified



<https://youtu.be/TtsYmA31jIQ>



# Naïo Technologies

*Producing healthy food sustainably*

## Sales

*150 sales since 2014*

*Turnover doubling each year*

*20 trained dealers in 8 countries*

### Skills:

- Agriculture sensitivity
- Agronomy (vines and vegetables)
- Presentations/Shows & Interviews
- Adaptability
- Very good understanding of market & farmers





<https://www.smalink.com/JQMobile.aspx?Page=Logon>

<http://www.motivoengineering.com/>

<http://www.acfr.usyd.edu.au/>

<https://www.autonomoustractor.com/>

<http://smartmachines.bluerivertechnology.com/>

<https://www.youtube.com/watch?v=OfWerw50d0Y>

<https://www.youtube.com/watch?v=6TiQAtIld5I>

<https://www.precisionmakers.com/en/x-pert/>

<https://www.youtube.com/watch?v=DSkV0iWa6MA>

<http://www.smart-ag.com/>

<https://www.youtube.com/watch?v=DXO2xFwrUM&feature=youtu.be>

<https://seedotrun.com/>

<https://sagarobotics.com/>

<http://www.vitibot.fr/en/home>

<https://www.youtube.com/channel/UCfO5dqOpL0pLd6rdo2PXjrg>

<https://www.youtube.com/watch?v=T7Os50kf3OQ>

<https://www.youtube.com/watch?v=15fovWSnIe0>

<http://smartmachines.bluerivertechnology.com/>

<https://www.fendt.com/int/xaver.html>

<http://mantisag-tech.com/>

<https://www.visionrobotics.com/vr-lettuce-thinner>

<https://farmwise.io/#page-technology>

<http://www.swarmfarm.com/>





**K.U.L.T. = 12 Monate im Jahr im Einsatz  
( hier bei 40° C in Arizona)**

