The green future of German viticulture

Antwerp 19th September
Romana Echensperger MW

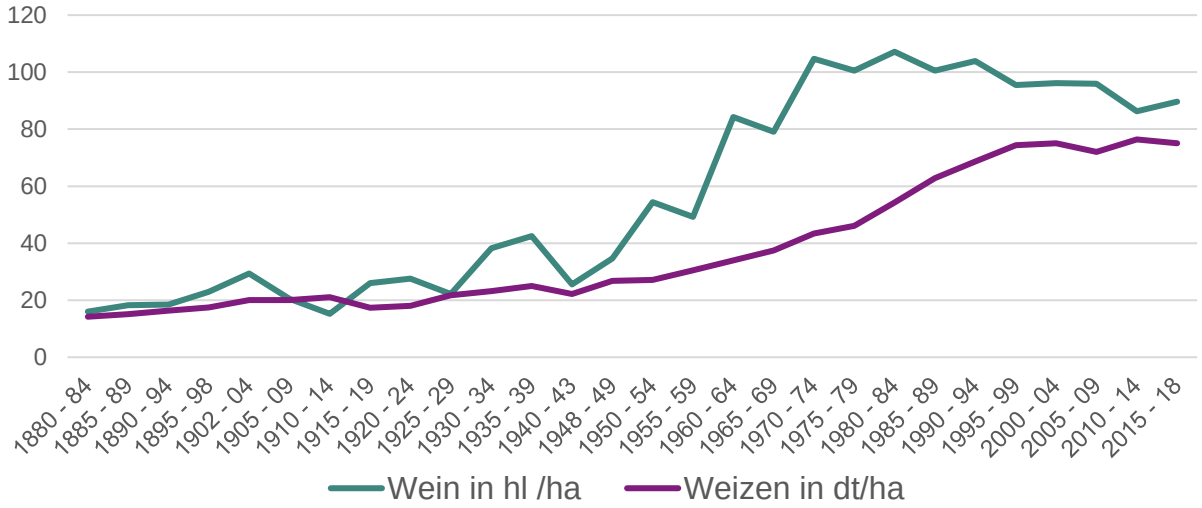
Wines of Germany

The hard facts...

Setting the scene...

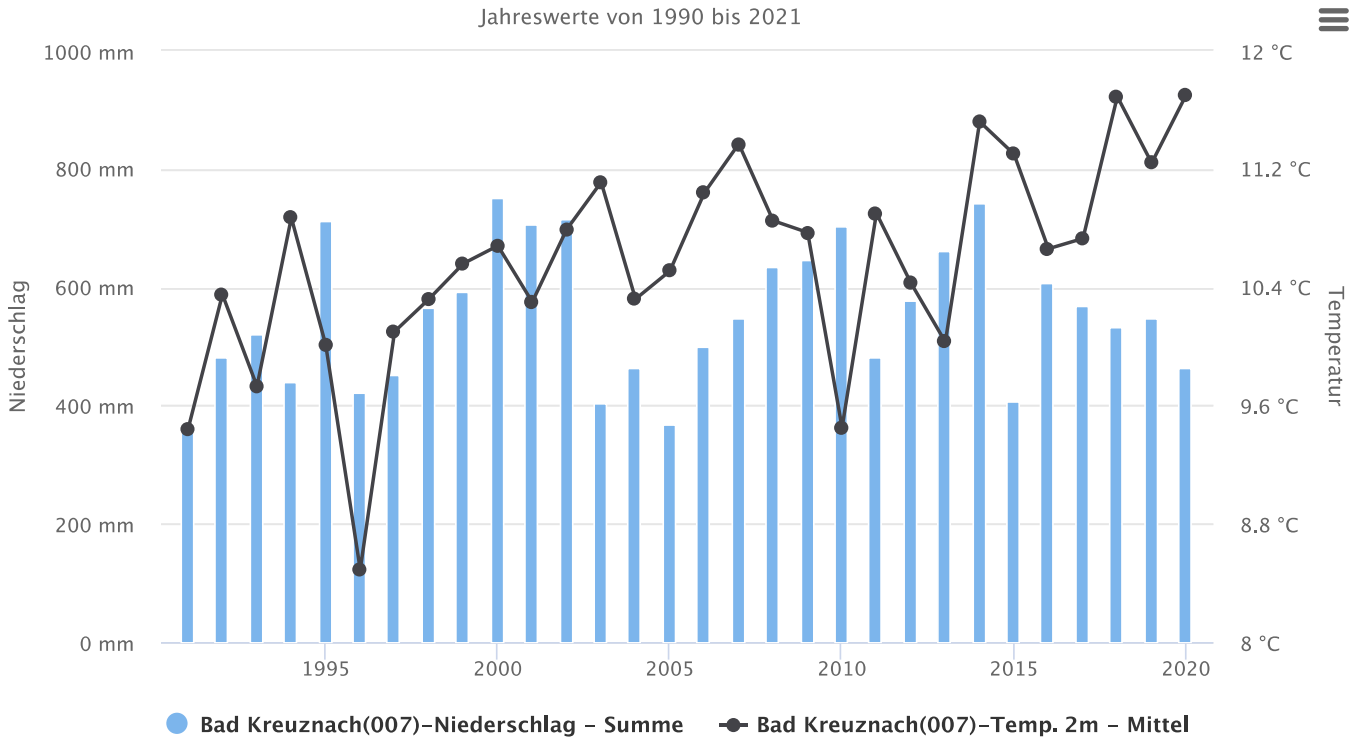
Source / Fotocredit: Rebschule Wallis

Five-year average yield development for wine and wheat in Germany (respective territorial status) from 1880 to today (Source: statista.de / Helmut Kalinke)



Climate Change

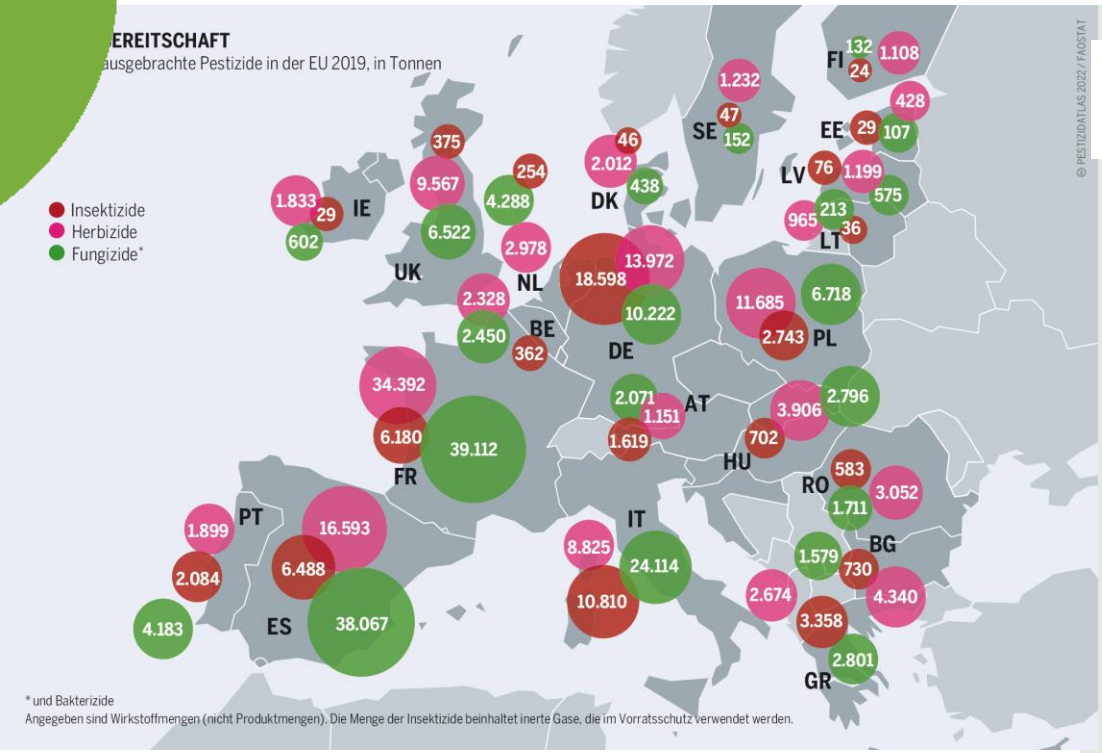
Source: Agrarmeteorologie Rheinland Pfalz / www.am.rlp.de
example: Bad Kreuznach (Nahe - Germany)



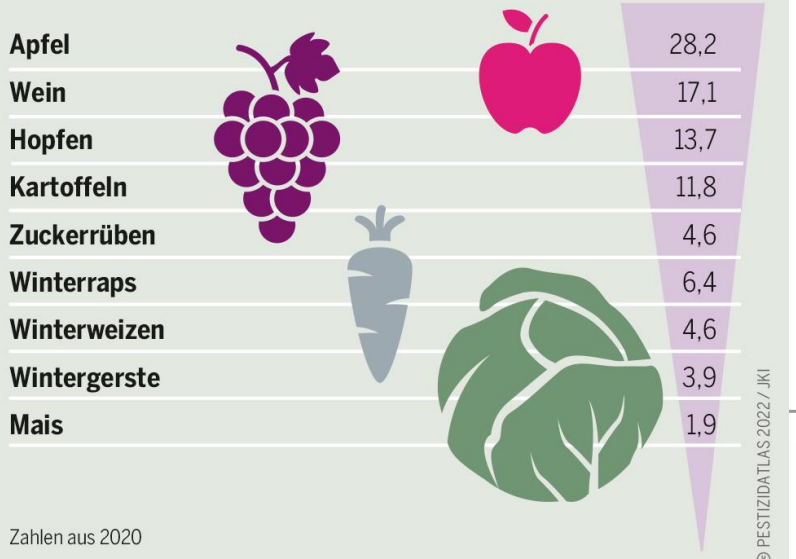
Quelle: Agrarmeteorologie Rheinland-Pfalz

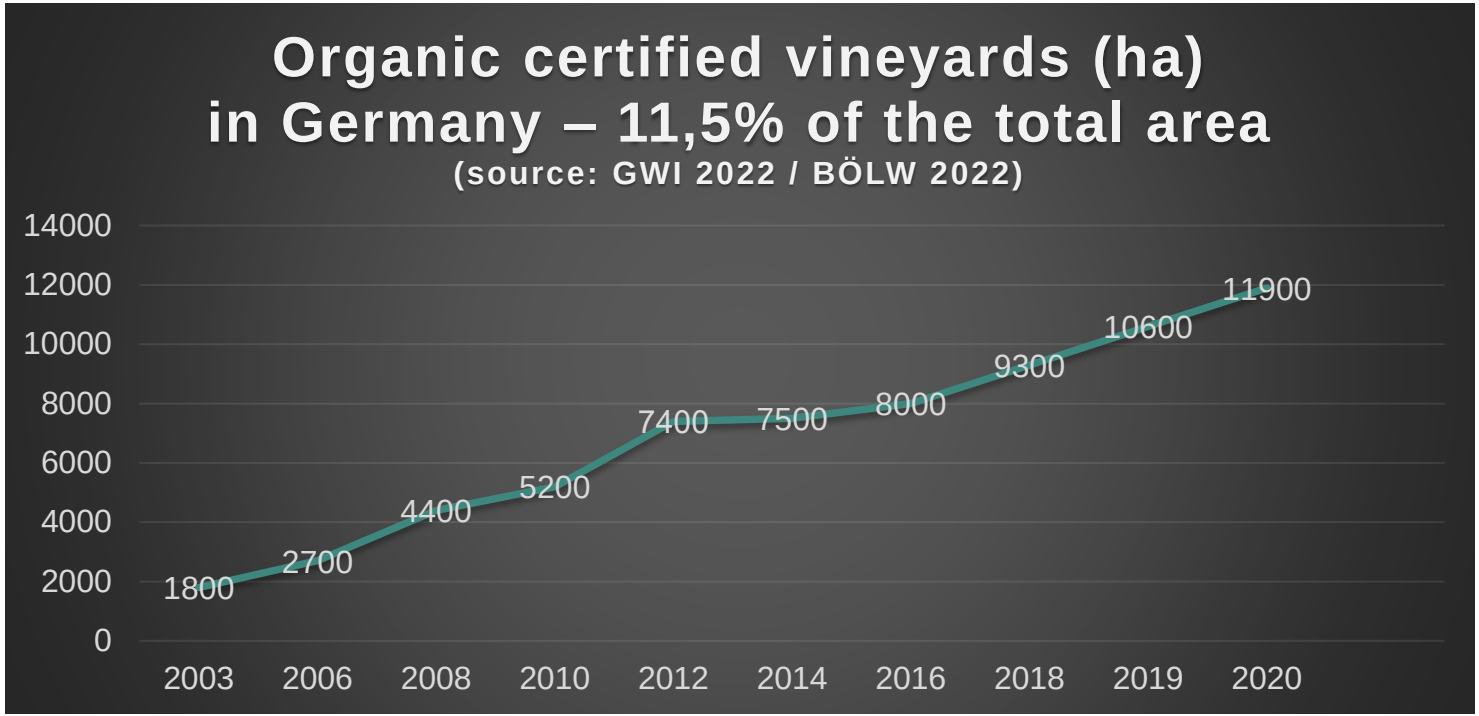
Pesticides in Agriculture and especially Viticulture

Source: Pesticide Atlas 2022 / Heinrich Böll Stiftung (Foundation of the Green Party in Germany)
BUND Germany / PAN Germany and Le Monde Diplomatique
Credit graphs: Pestizidatlas, Eimermacher/Puchalla / document can be downloaded under:
boell.de/pestizidatlas2022

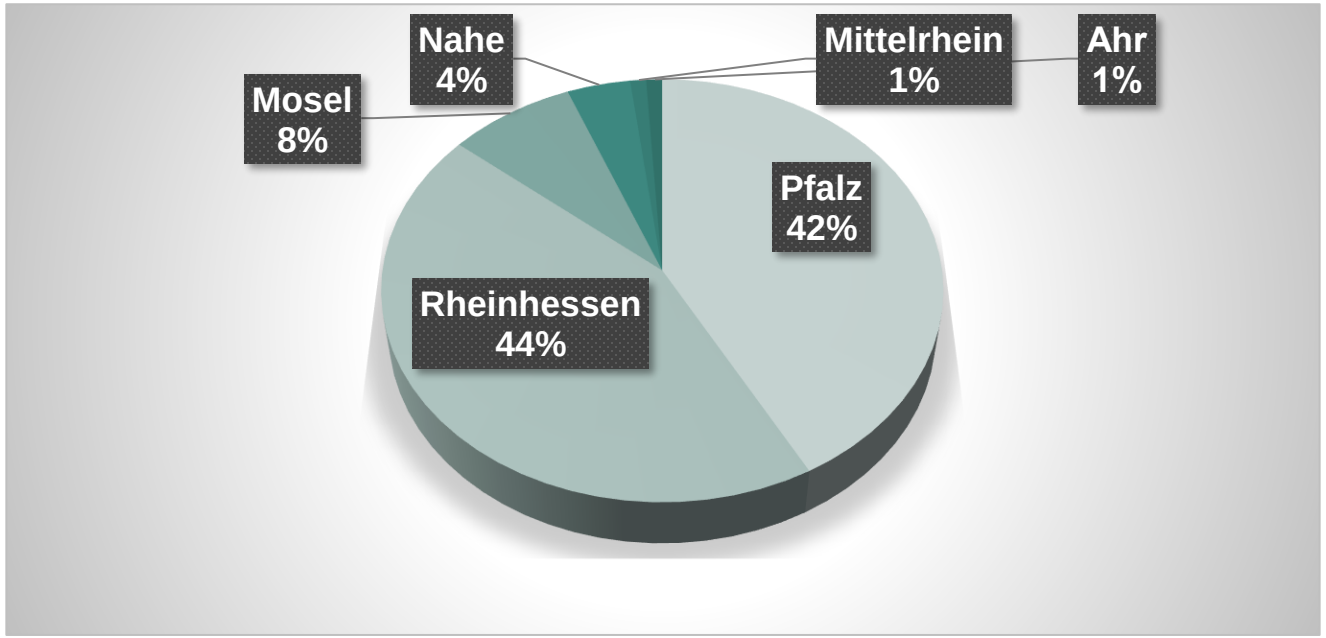


The treatment index shows how intensively which plant is treated with pesticide. Example Germany / Status 2020




Organic certified vineyards (ha)
in Germany – 11,5% of the total area
(source: GWI 2022 / BÖLW 2022)
14000
12000
10000
8000
6000
4000
2000
0
1800
2700
4400
5200
7400
7500
8000
9300
10600
11900
2003
2006
2008
2010
2012
2014
2016
2018
2019
2020

Where to find organic vineyards in the federal state of Rheinland Pfalz (source: Bernd Kern, 2019):



Organic certifications (not included: biodynamic certifications)

ECOVIN

Naturland

Bioland

Tasting Flight 1: Organic

- Riesling Sekt brut / Sektmanufaktur Strauch / Rheinhessen
- 2018 Rauenthaler Baiken / Riesling trocken
  Weingut Corvers-Kauter Rheingau
- 2018 Saphir / Weingut Schwegler / Württemberg
- 2020 SANS Scheurebe trocken / Bio-Weingut Benzinger / Pfalz

Organics in the cellar...

Wines of Germany

Quality definition – ideal:

The goal is to produce healthy grapes that are of such composition and microbial population, that they produce a wine that is coherent in itself – maybe only with the use of some sulfur dioxide.

Time and no additives: „Natural slowness“

Bildquelle: printplanet.de

Standard or guidelines?

How does the style of wine change?

Fotocredit: Peter Obenaus

Biodynamic Viticulture…

Picture: Konstantin Volkmar

Wines of Germany

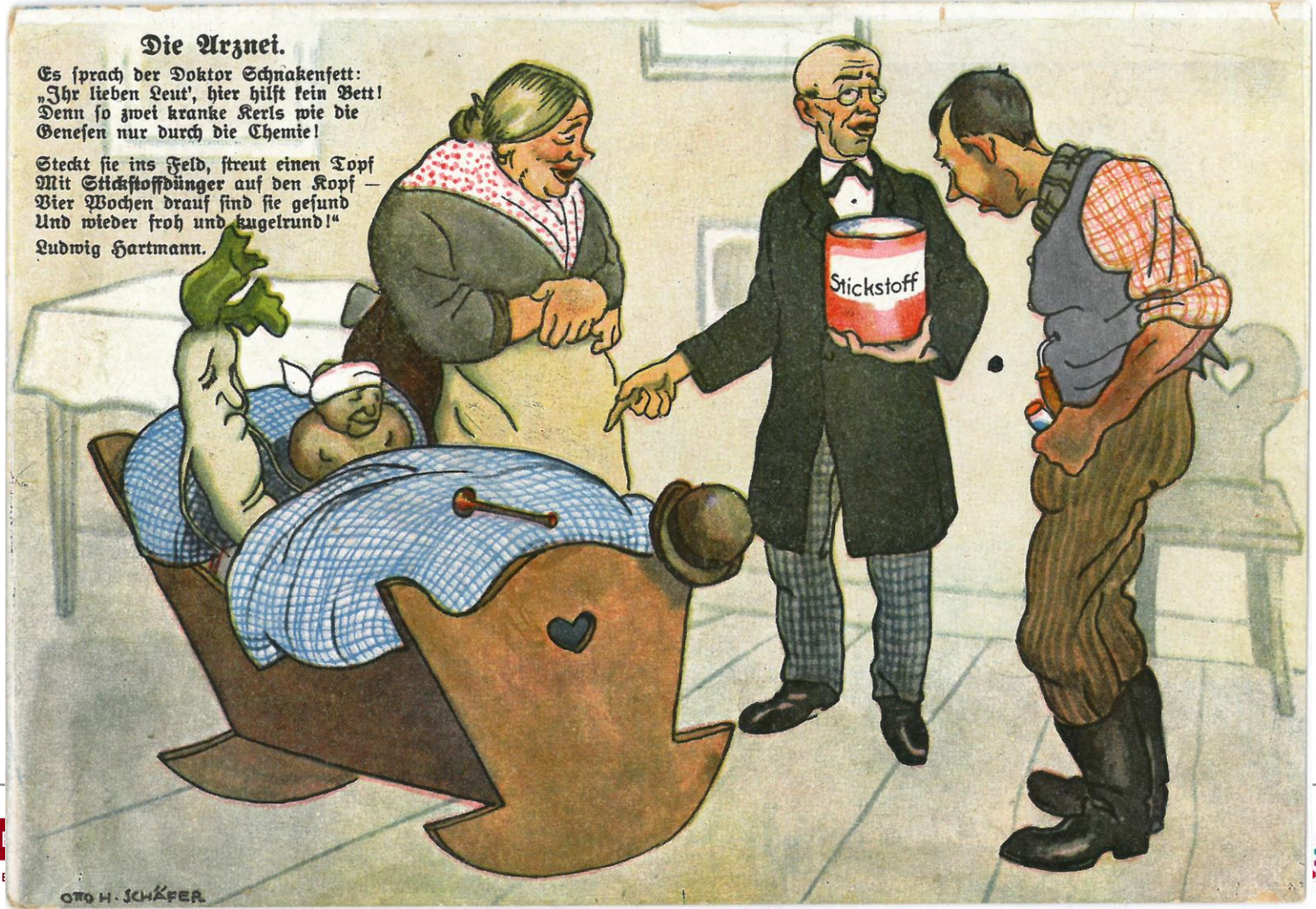
It‘s the nitrogen, of course!

Die Arznei.

Es sprach der Doktor Schnakenfett:
„Ihr lieben Leut', hier hilft kein Bett!
Denn so zwei kranke Kerls wie die
Genesen nur durch die Chemie!

Steckt sie ins Feld, streut einen Topf
Mit Stickstoffdünger auf den Kopf —
Vier Wochen drauf sind sie gesund
Und wieder froh und kugelrund!"

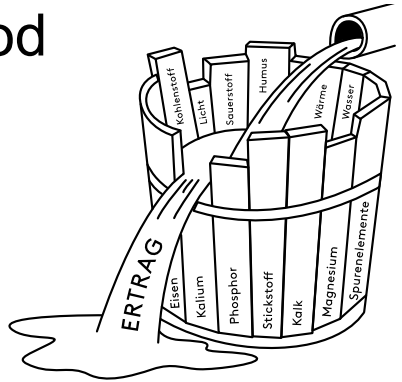
Ludwig Hartmann.



Main nutrients and where they come / came from as artificial fertilizers

- Nitrogen ▶ competition agriculture and war industry

  Chilesalpeter / 1910: Haber-Bosch-Method



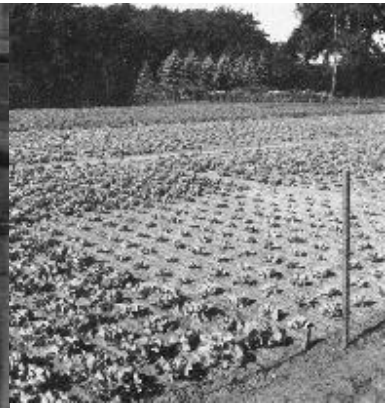
- Phosphorus:

  Waste from steel production

- Potassium:

  Mining (state owned)

Liebig‘s law: It states that growth is dictated not by total ressources available, but by the scarcest resource



Pictures: 100 Jahre Superphosphat, 75 Jahre Verein Deutscher Dünger-Fabrikanten, Festschrift, Wiesbaden 1955

Methodology advantage for artificial fertilizers

Laboratory versus field trial

„knowledge pooled on the fields...“

“Compared to the hundreds of trials on the effect of commercial fertilizers, there is scarcely one experiment with stable manure.”

Soil biologist Felix Löhnis – 1928

Disadvantage of other disciplines:

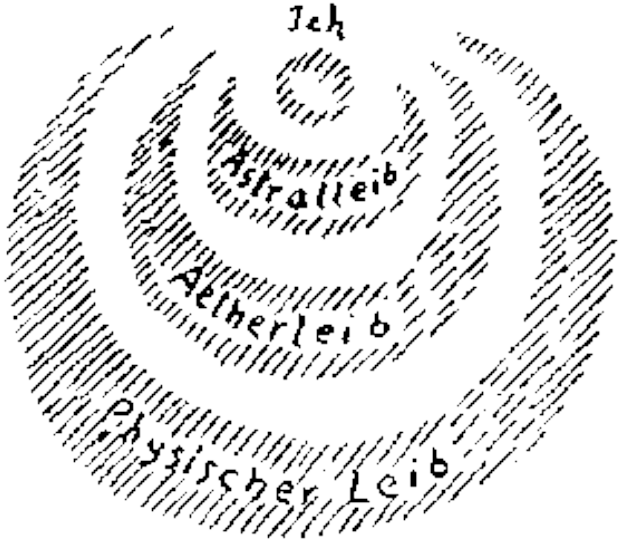
- Less potential for commercialisation
- Complexity of soil and humus

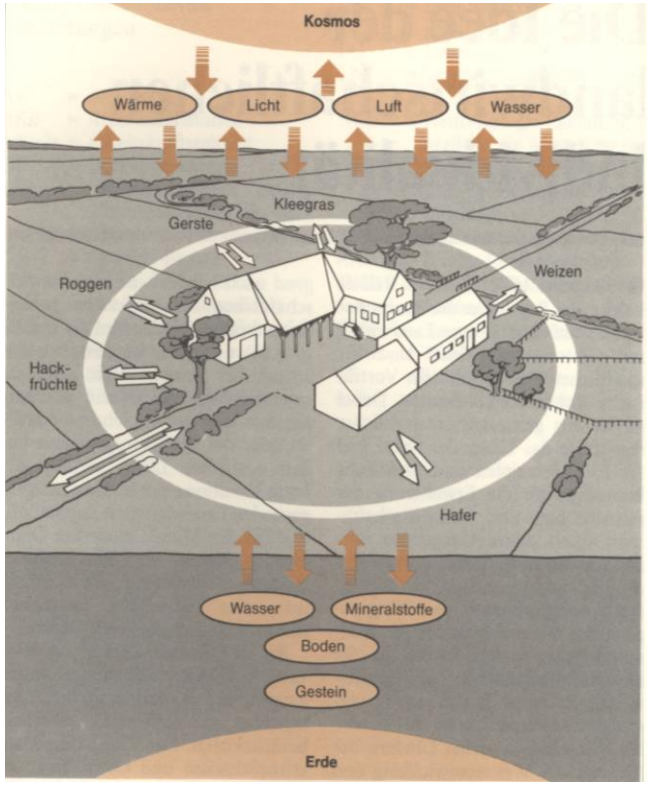
▶ Agriculture became a branch of chemistry

Aims and objectives:

- Goals formulated in search of quality and sustainability
- Orientation and roots, of course, in Rudolf Steiner - THEREFORE:
- Commitment to further development = modern agroecology, technology and today's social conditions.
- **Complementary not alternative** to natural science
- Development and emancipation

From EGO to ECO:



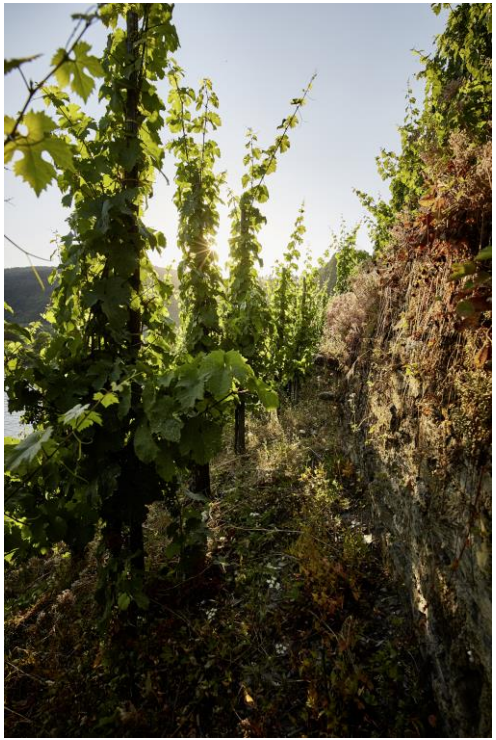


(Quelle: Sattler/Wistinghausen; 1985)

BIODYVIN

Tasting Flight 2: Biodynamic

- Cuvée N°317 extra brut / Weingut Eymann / Pfalz
- 2021 Auxerrois trocken / Weingut im Zwölberich / Nahe
- 2020 Pinot Noir *** / Weingut Kaufmann / Rheingau
- 2018 Marienburg „Fahrlay-Terrassen“ / Riesling VDP.GG
  Weingut Clemens Busch / Mosel



Sustainabilty…

Does copper challenge organic farming?

Arguments:

- Heavy metal that accumulates in the soil - pollutes soil life.
- Is on the EU list of plant protection products to be banned.
- In the EU, 4 kg/ha and year are still permitted (organic cultivation 3 kg/ha and year).

Differentiation:

- Contaminated sites? Where does the partially high pollution come from?
- Humus content and term of aged copper?
- INBIODYN and VITIFIT in Geisenheim
- Copper is also used in conventional cultivation.

Funghus Resistant Varieties
(source: GWI website, 08th May 2022)

- 80% less plant protection needed
- 2 treatments with ecological sprays
- Saving of 40 kg/ha CO2 per plant protection measure
- Around 3% of vineyards planted in Germany

Most planted:

- Regent (red) 1722 ha (Silvaner x Müller Thurgau) x Chambourcin
- Solaris (white) 190 ha Merzling x Gm 6493 (Zarya Severa x Musat Ottonel)
- Cabernet Blanc (white) 203 ha Cabernet Sauvignon x Resistenzpartner
- Souvignier Gris (white) 91 ha Merzling x Gm 6493 (Seyval blanc & Zähringer)

Fair‘n Green Certification

- 2013 founding year
- 3.672 ha certified
- 1200 winegrowers (incl. co-operatives)
- 102 wineries
- continuous improvement in the areas of viticulture, cellar technology, management and environment
- **Plant protection and system of toxic load index**
- Research projects: AMBITO (about biodiversity)
- Reduction of CO2 emisions = focal point

FAIR'N GREEN

Example „Eco2Bottle“ / CO2 footprint

Source: Wiegand Glass / Corvers-Kauter 2022

- 47% of CO2 Emissions are linked to the glass bottle (19% Vineyard + 24% Cellar)
- Weight „Eco2Bottle“: 415g

  („Schlegel“ bottle 560g & GG bottle 700g)
- Height: 327mm („Schlegel“ bottle 350mm)

= + 40% possible truck load

Example plant protection use / technology

Picture source: droneparts.de

Building technology

Tasting Flight 3: Sustainable

- 2019 Brut de Selztal / Weingut Braunewell / Rheinhessen
- 2020 Saar Riesling / VDP.Gutswein / Van Volxem / Mosel
- 2016 Réserve Glockenspiel Spätburgunder / Weingut Neiss / Pfalz
- 2021 Cabernet Blanc / Reh Kendermann / Deutscher Wein

Thank you for your attention!

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WINE in MODERATION

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