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Federal Department of Economic Affairs FDEA
Agroscope Changins-Wädenswil Research Station ACW

Economic evaluation from a network of fruit growers

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agridea
ENTWICKLUNG DER LANDWIRTSCHAFT UND DES LÄNDLICHEN RA
DÉVELOPPEMENT DE L'AGRICULTURE ET DE L'ESPACE RURAL
SVILUPPO DELL'AGRICOLTURA E DELLE AREE RURALI
DEVELOPING AGRICULTURE AND RURAL AREAS

Content

- Fruit growers network Support Obst Arbo (SOA)
- Data
- Results for apples
- Patterns and dependencies in the SOA-data
- Conclusions & future

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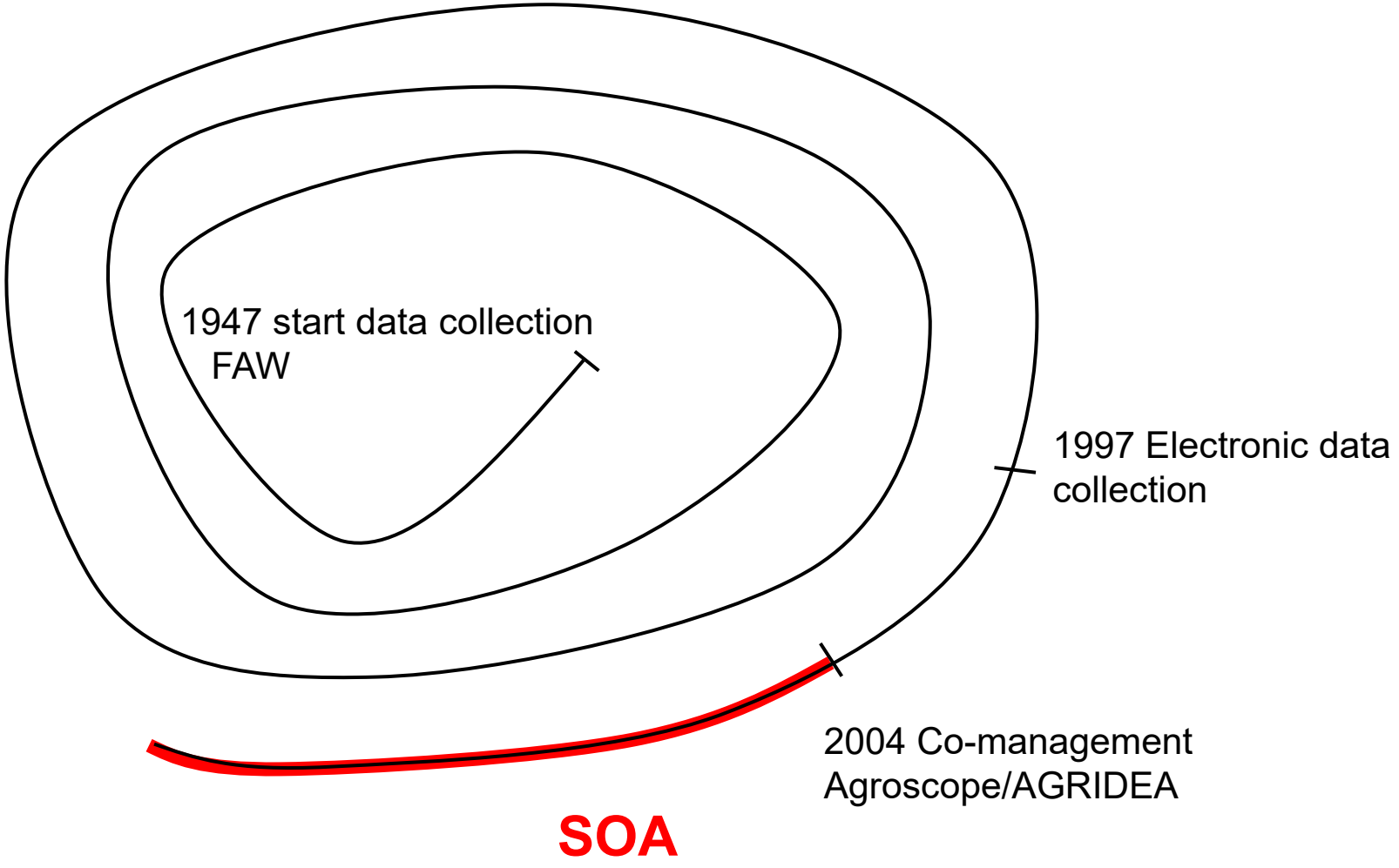
Network Support Obst Arbo: history



SOA 2023

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Goals

- Continuous monitoring and evaluation of the economic situation of Swiss fruit production.
- Evaluation of measures and production techniques that can lead to profitable fruit production.
- Development of recommendations for practice, industry and politics for the preservation of Swiss fruit production.
- Evaluation of the international competitiveness of Swiss fruit production.
- Management of a database with key production and economic data on Swiss fruit production.

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Function

SOA – Farms

AGRIDEA

AGROSCOPE

Schweizer Obstverband
Fruit-Union Suisse
Associazione Svizzera Frutta

Swiss
Fruit
Association

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Support Obst Arbo (SOA) - 2022

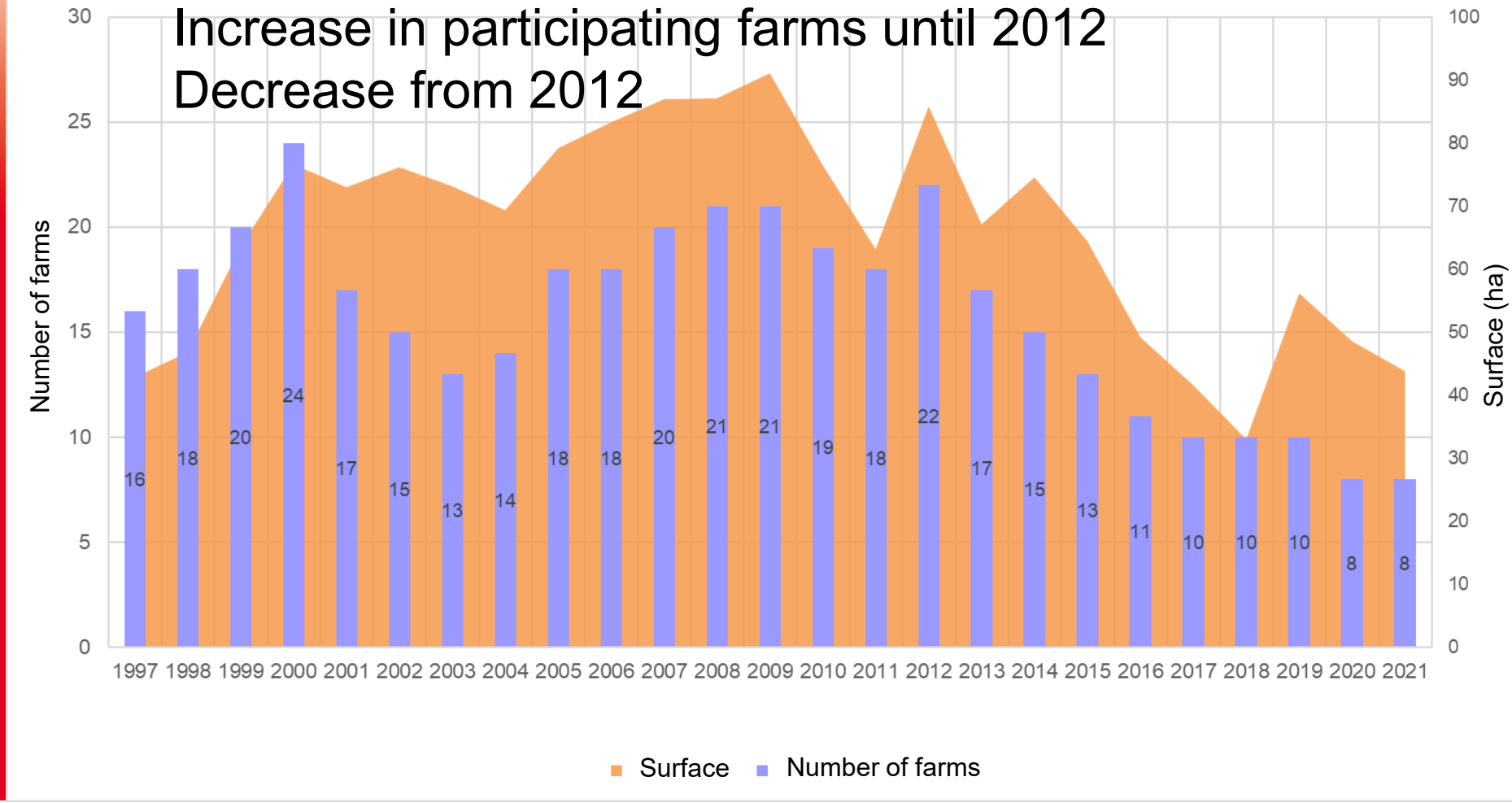
Network with 8 fruit growers using the field record system ASA-jAgrar

Inputs	Specification
Direct costs	Pesticides, fertilizers
Structural costs	Machines, tools, trees, anti-hail net, irrigation
Labour costs	Family labour and external labour
Productivity data	Yield, quality and prices

Data

fruit	years	Total number of plots
apple	1997-2021	3262
pear	1997-2021	960
cherry	2002-2021	614
prune	2002-2021	294

Number of farms und surface - Apple (IP + organic)



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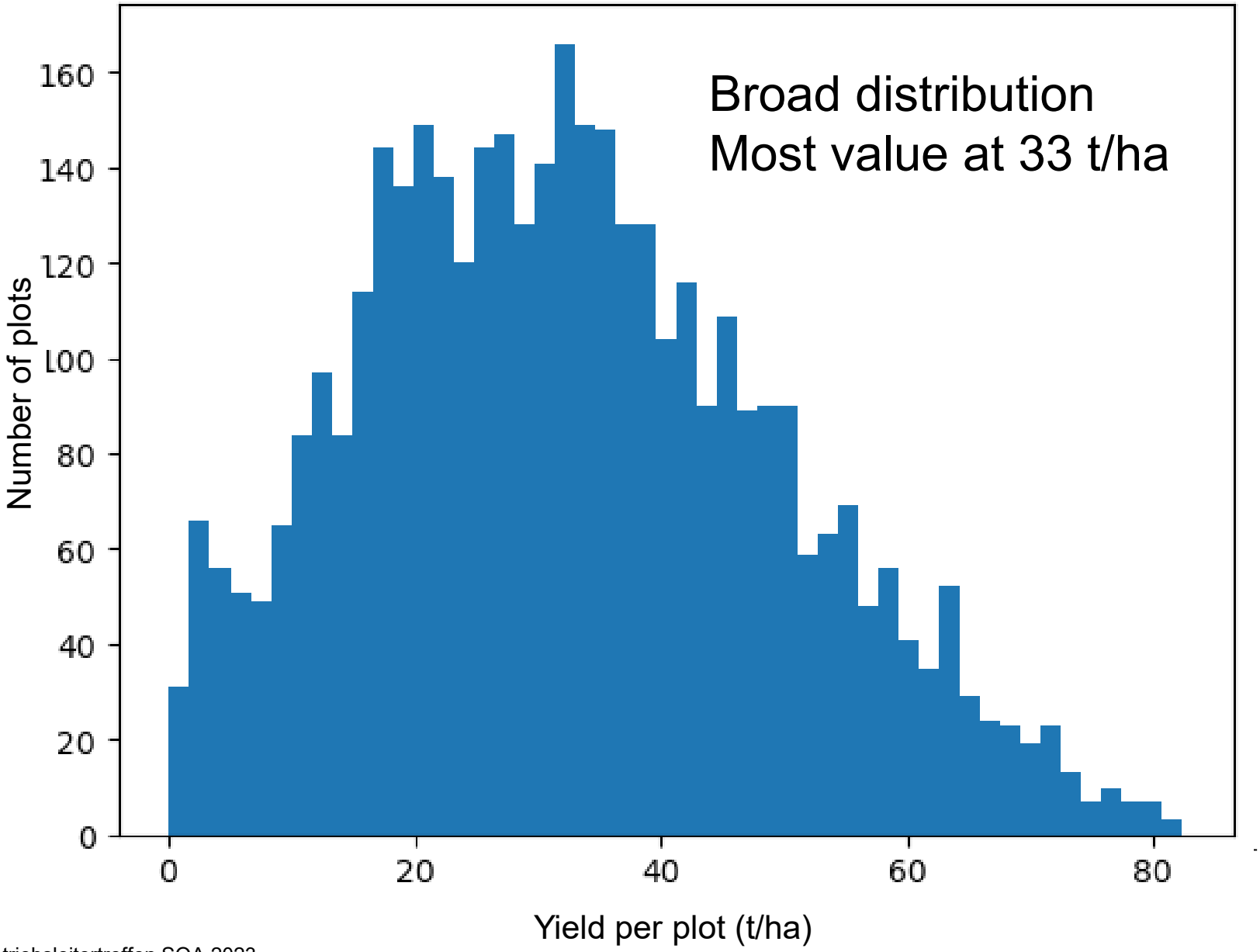
Distribution yields/ha 1997 - 2021



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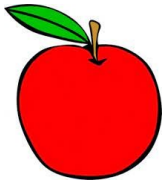
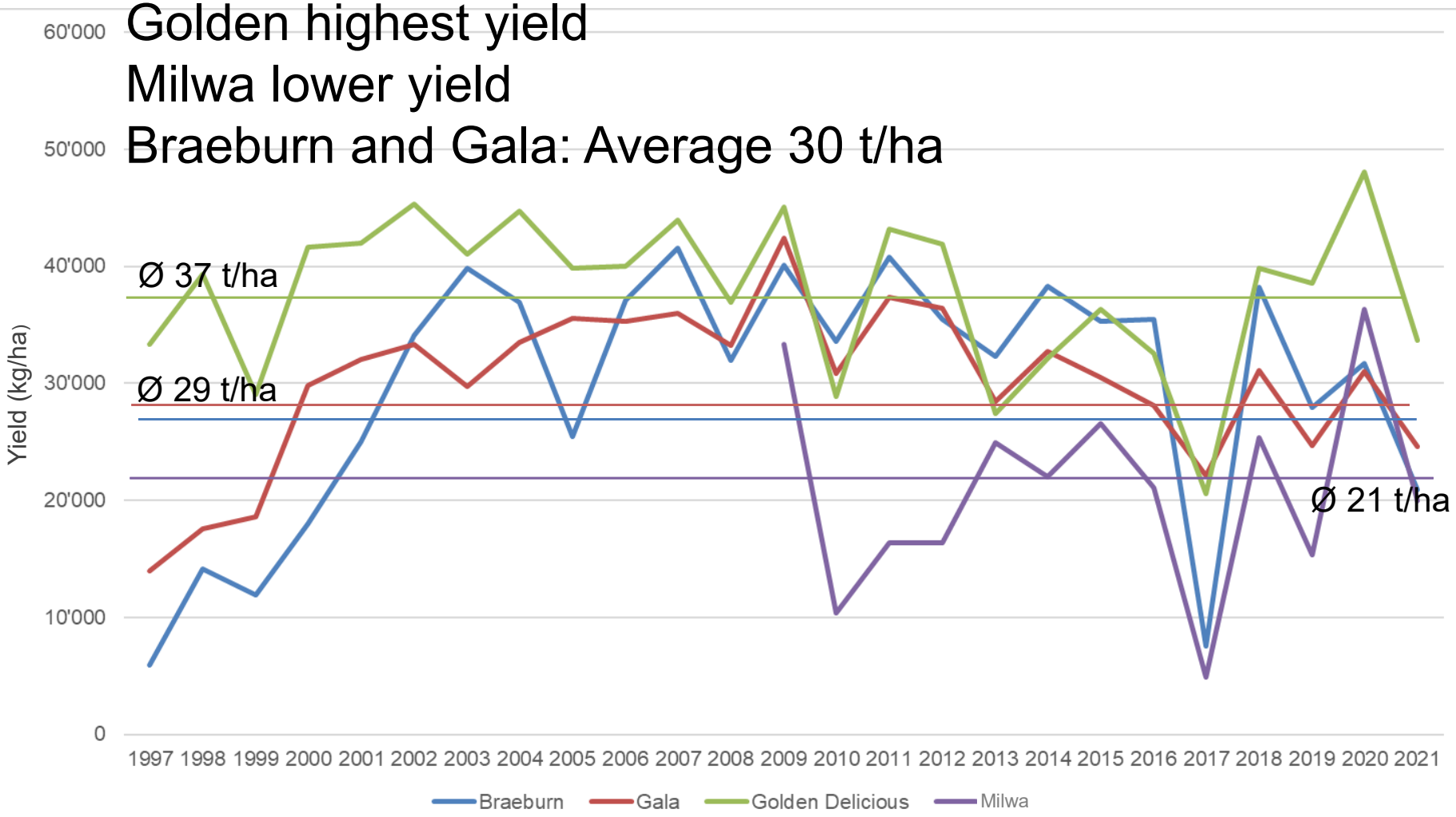
Yields for selected varieties



Golden highest yield
Milwa lower yield
Braeburn and Gala: Average 30 t/ha



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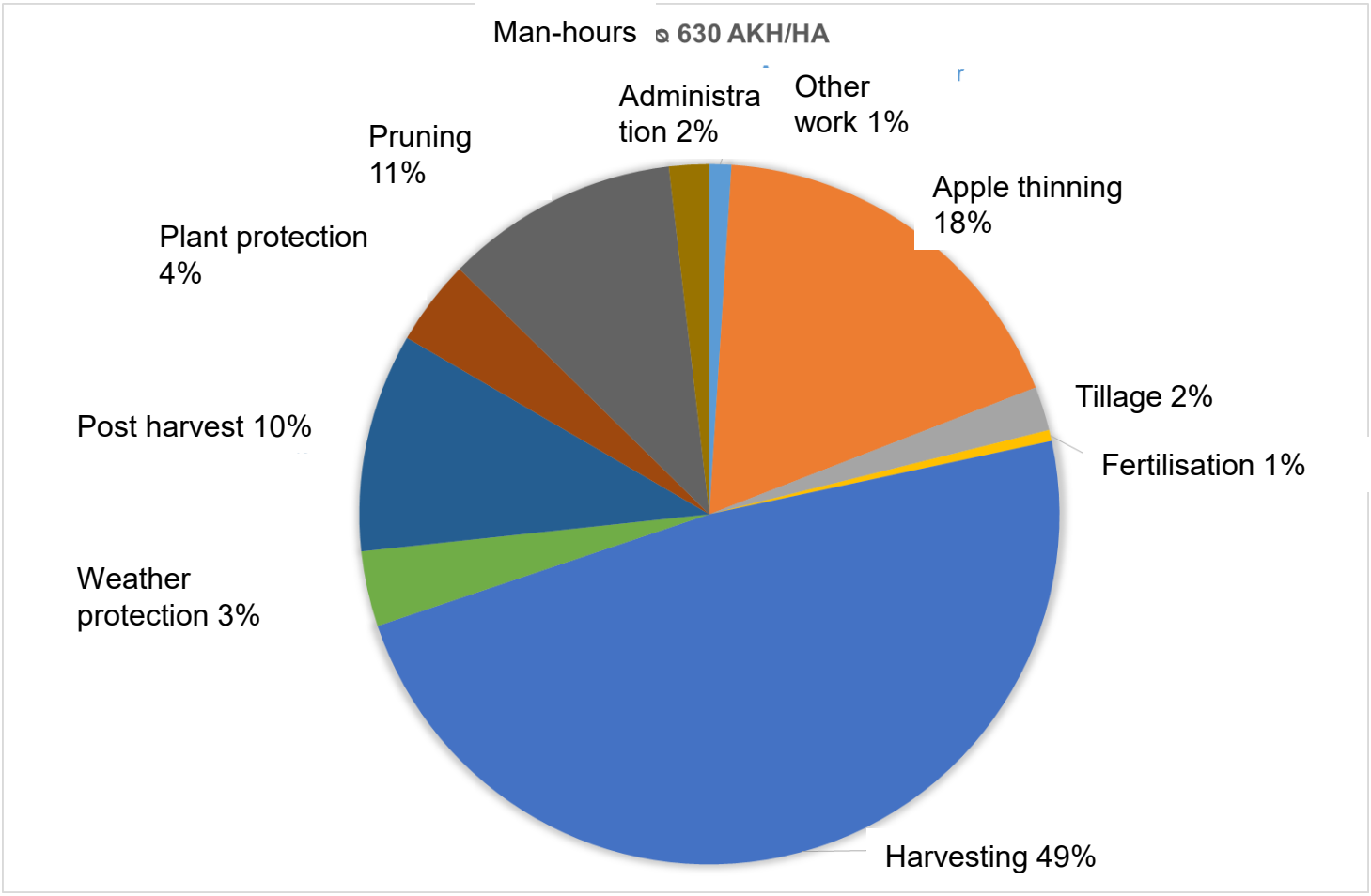
Labor distribution in apple production

Cultivars : Gala, Golden Delicious, Jonagold



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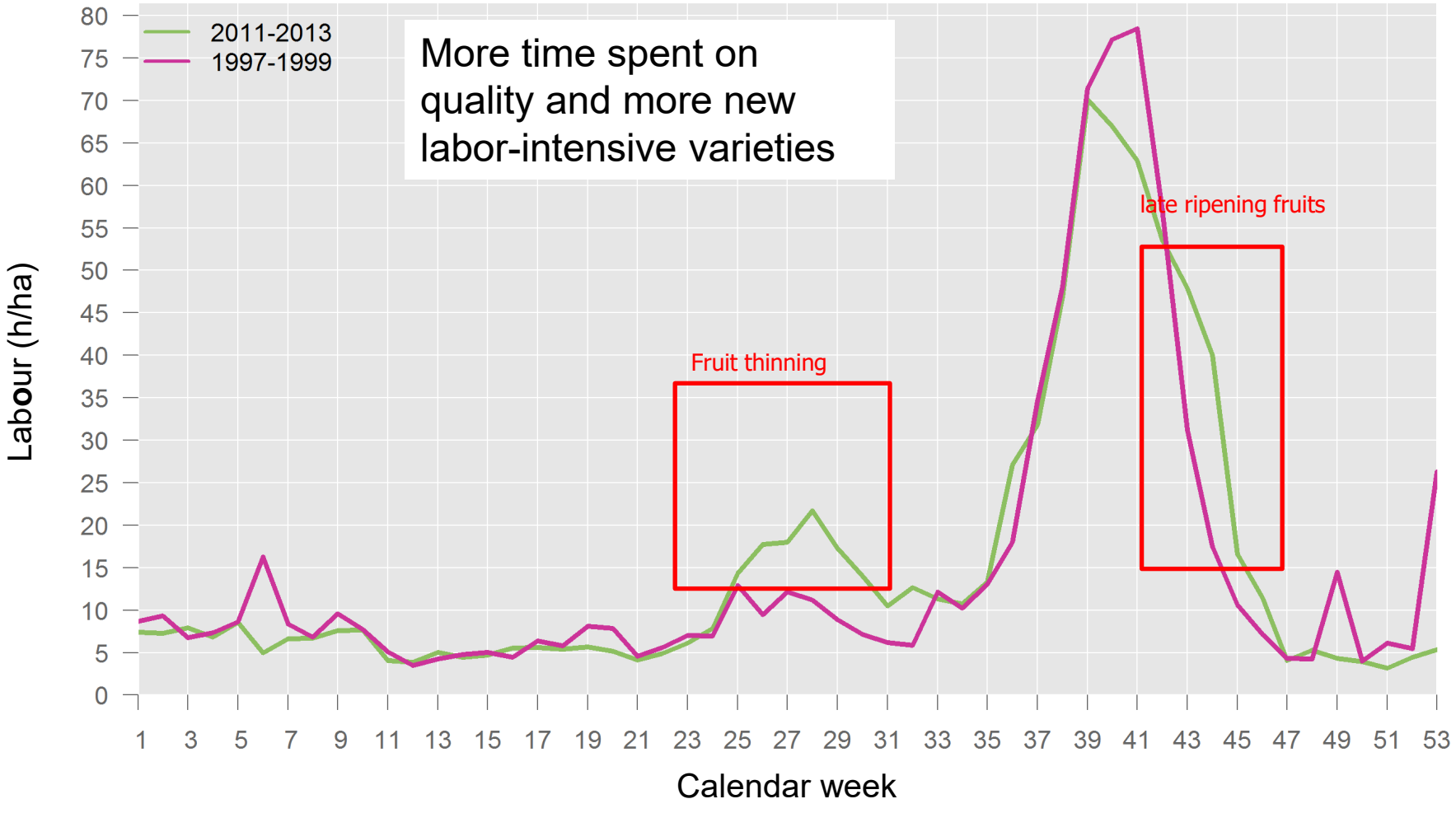
Labour distribution in apple production per week



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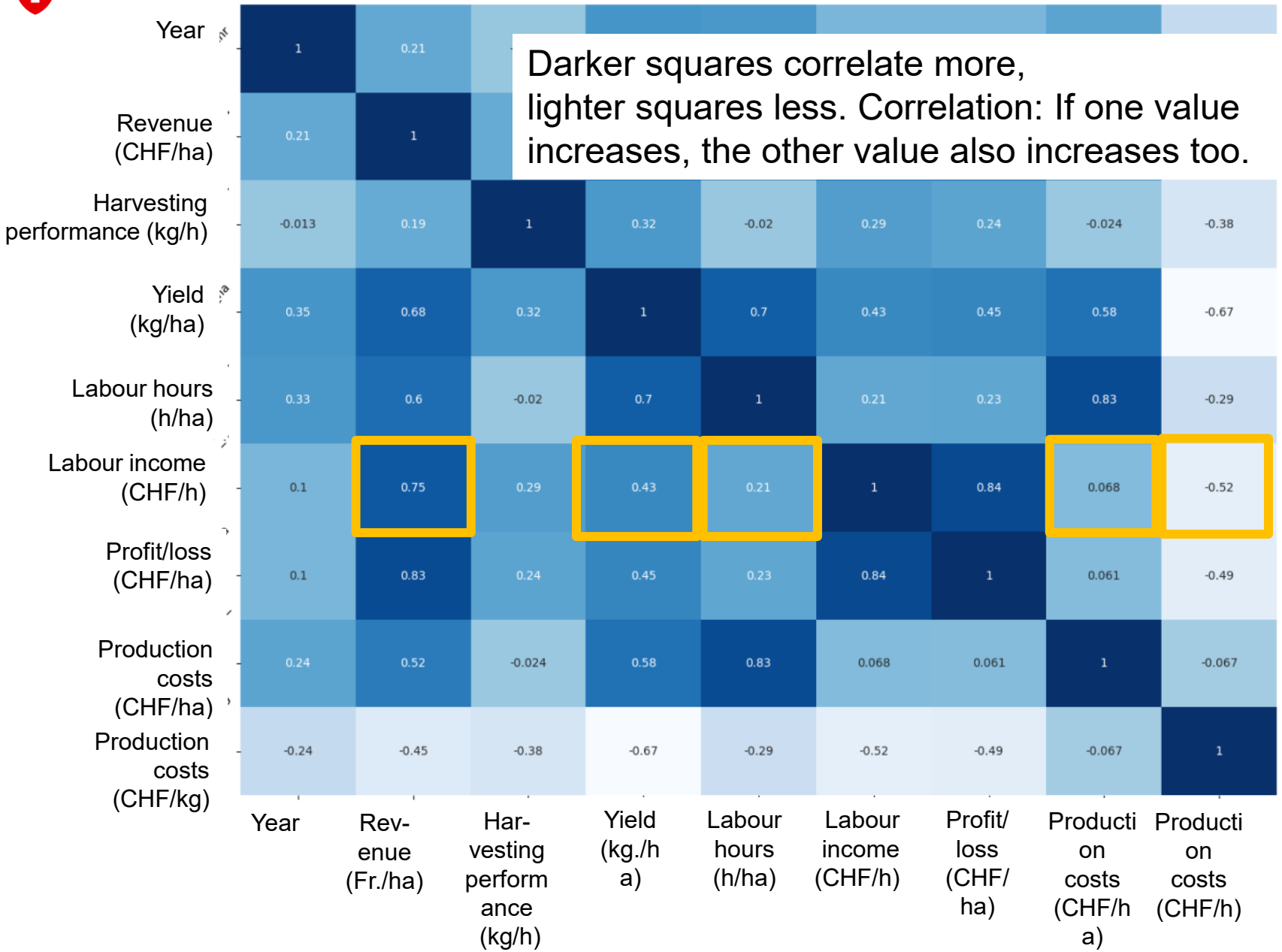
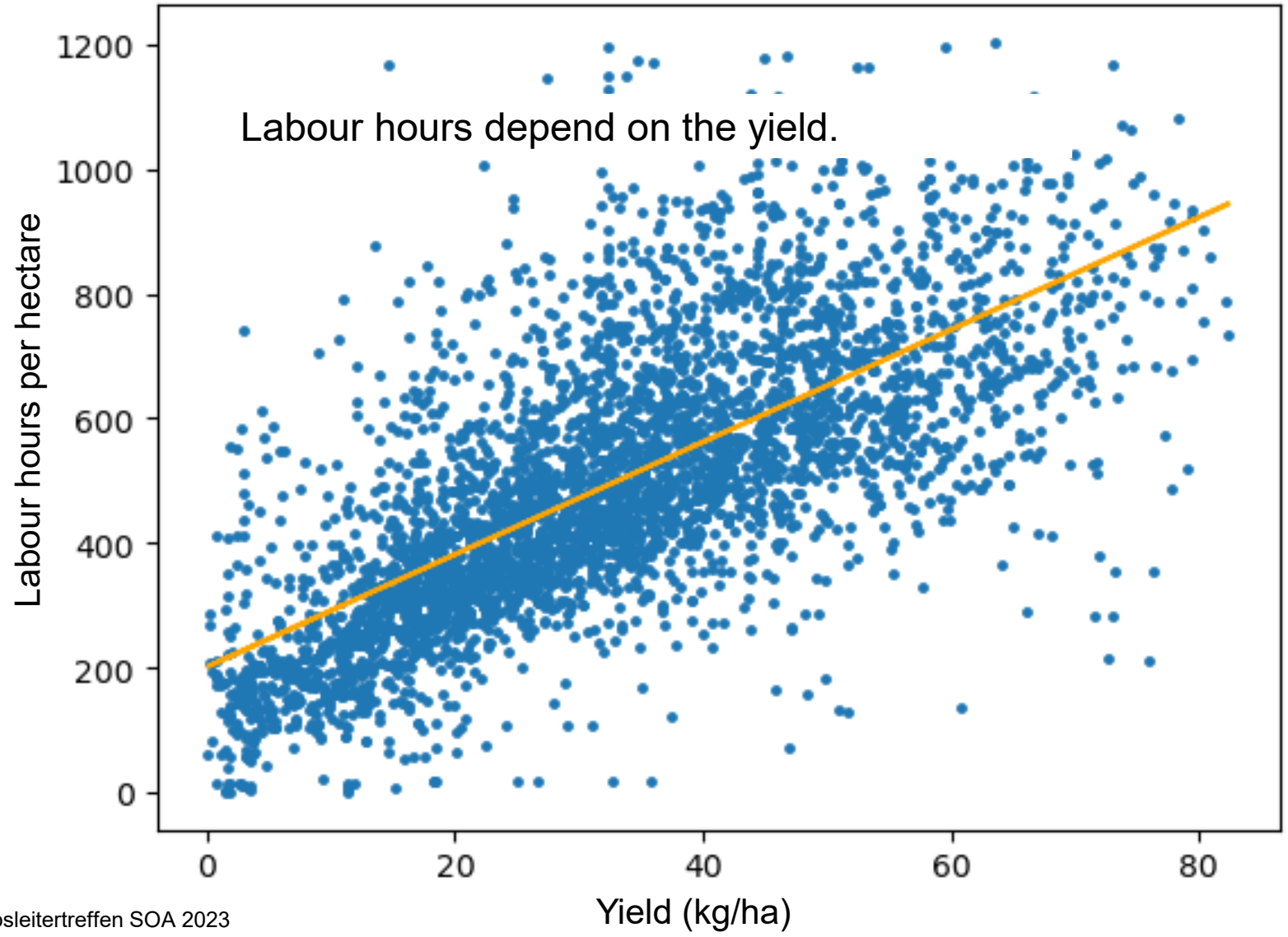
Patterns and dependencies in the SOA-data

Correlation influence factors



Labour hours per ha depending on yield/ha 1997-2021



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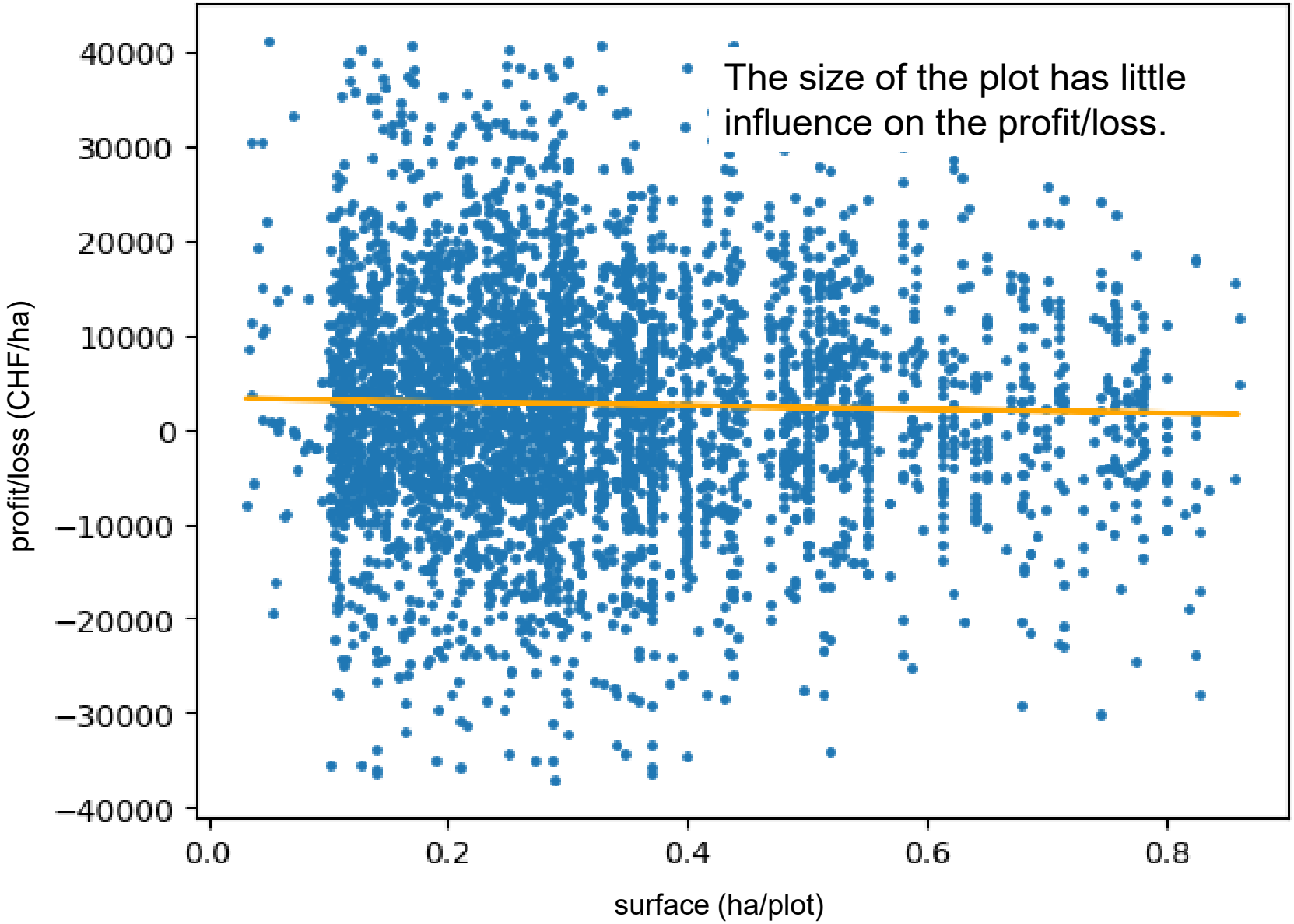
Profit/ha depending on surface area in ha



Conclusion

- Fruit growers use data to make their own plot-level decisions: variety selection, grubbing of the orchard, cooperation with other growers, succession.
- Our results have been used for the industry for negotiation, but also for education and training.
- The data was also used for the policy evaluation for the insurance solution.
- Data from 1997 to 2021 are/will be used to address different questions: climate change, bees, economic evaluation.
- Data from 1975 has been digitalised and used for the evaluation of plant protection use and ecotoxicity

Future

The network SOA has been dissolved in 2022

Farm managers are approaching retirement age.

Potential farm successors are no longer willing to record detailed data without adequate compensation.

Growers are still collecting their data for their own analysis.

Thank you for your attention

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Agroscope gutes Essen, gesunde Umwelt
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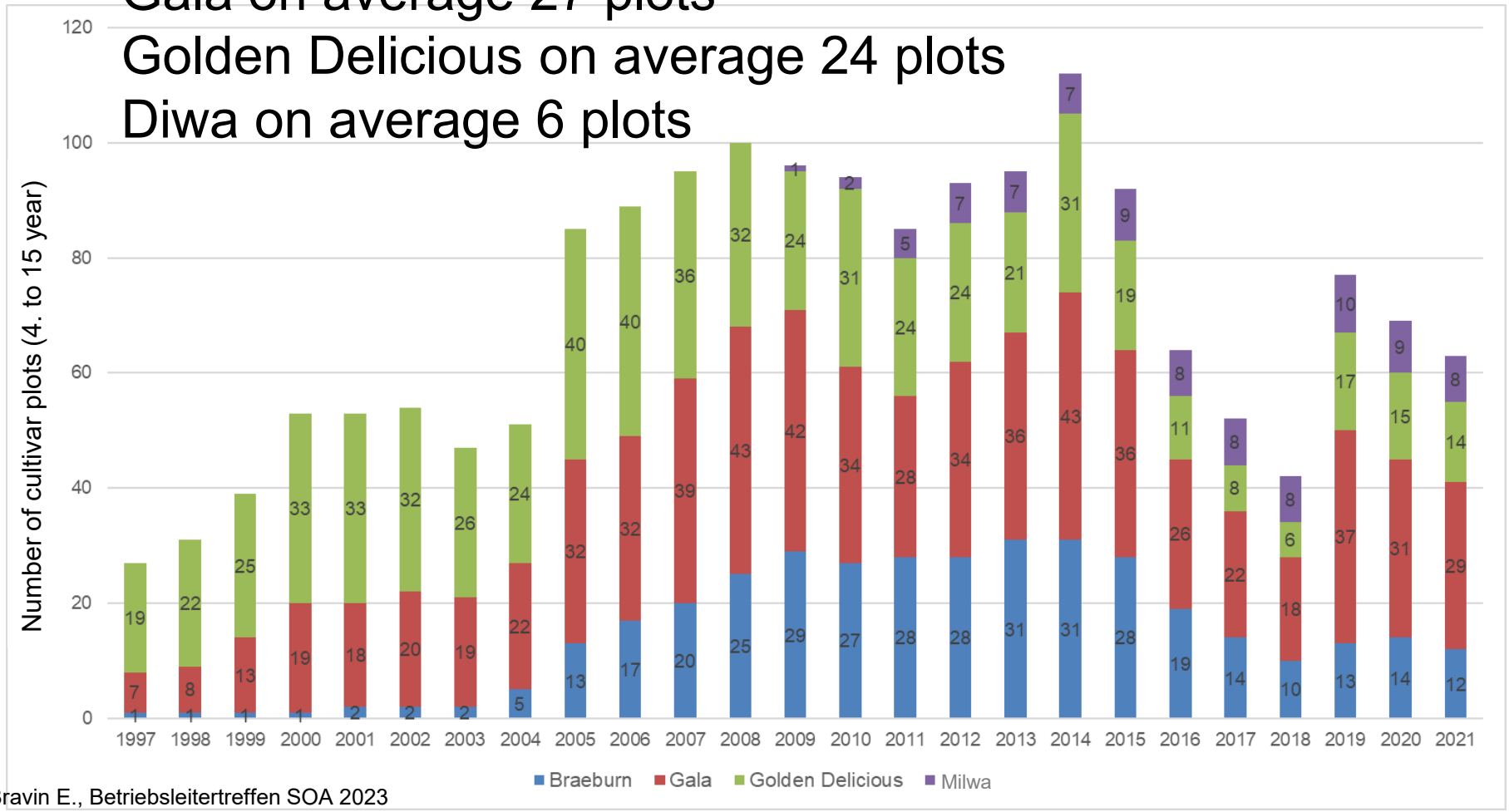
Number of plots – Braeburn, Gala, Golden Delicious and Milwa

Braeburn on average 15 plots
Gala on average 27 plots
Golden Delicious on average 24 plots
Diwa on average 6 plots



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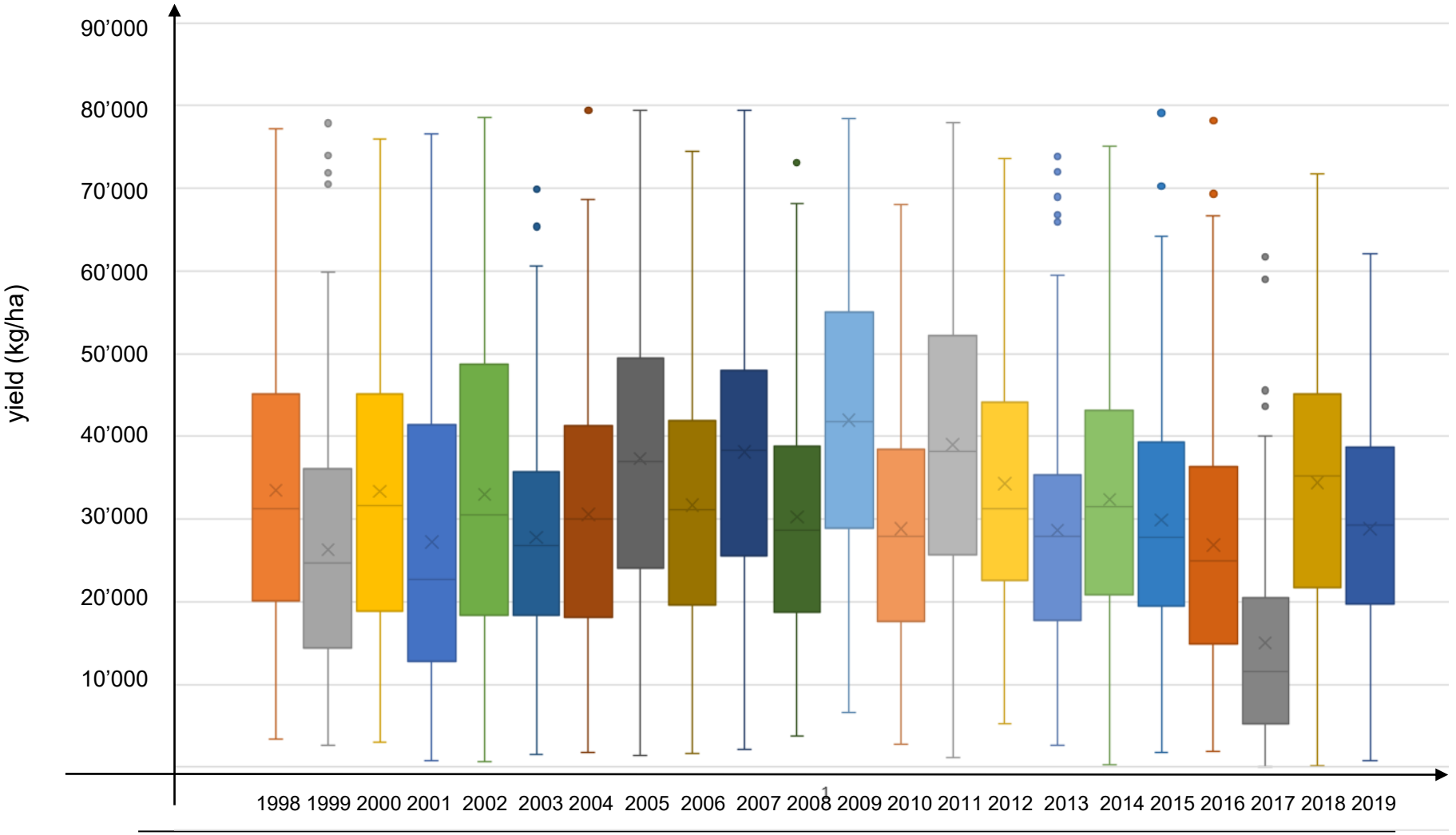
SOA yields from 1998 to 2019



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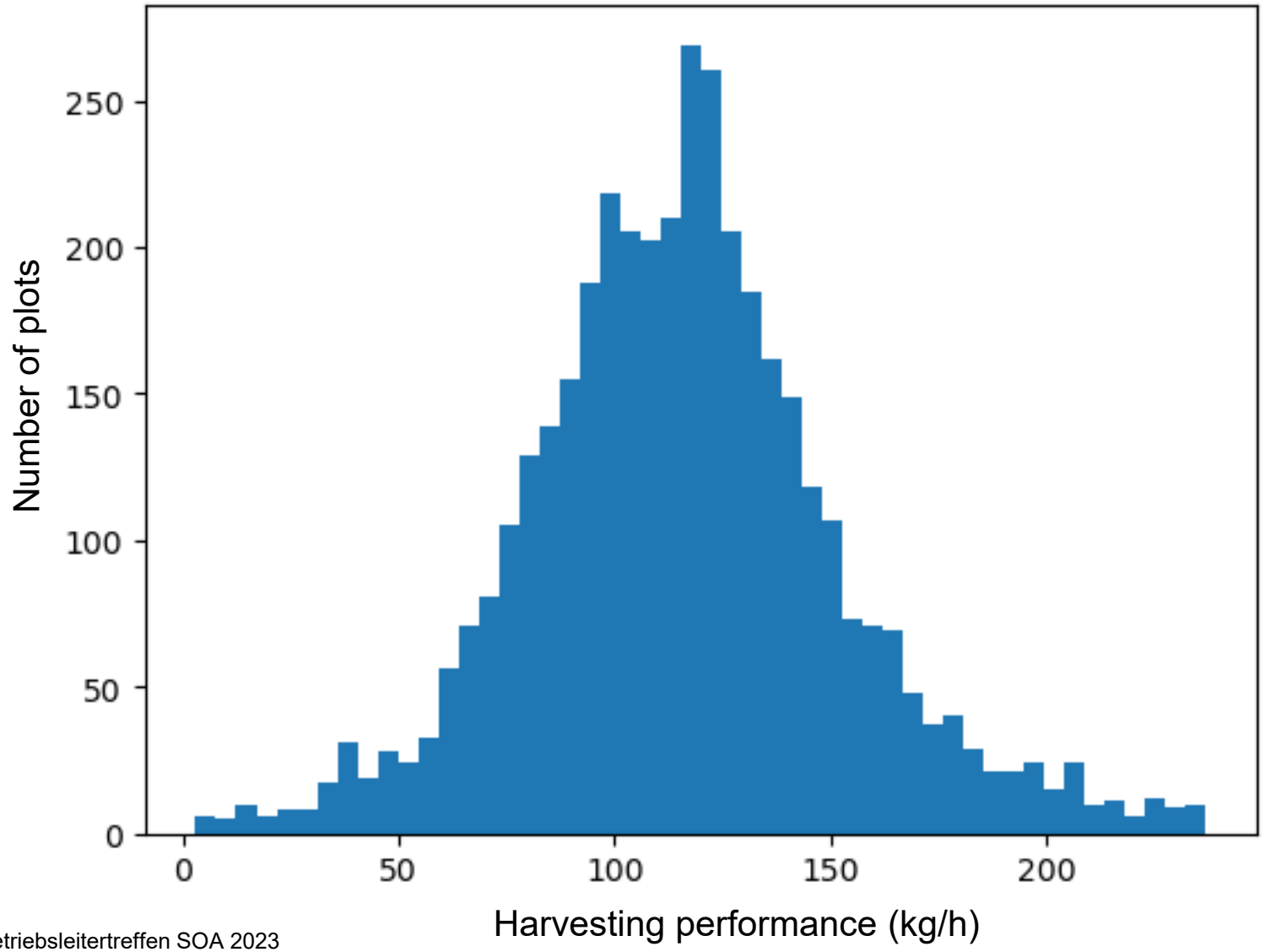
Distribution of harvesting performance (kg/h) 1997-2021



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