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# Common Reed for Thatching in Northern Germany

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# Paludi-PRIMA project

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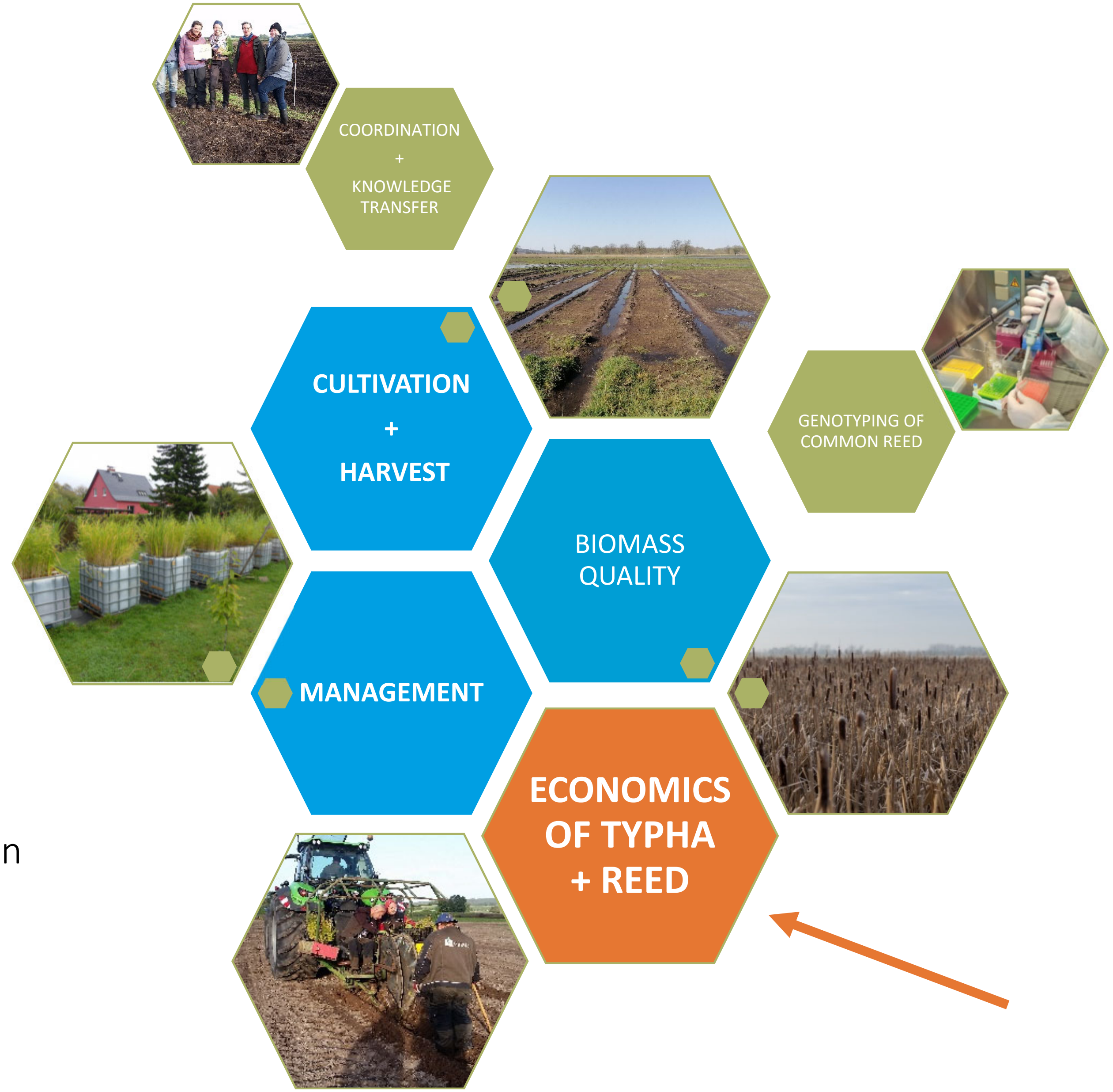
Paludi-PRIMA

Putting paludiculture into practice:
Integration – Management - Cultivation



# Common reed for thatching

- Long tradition (since 4000 BC) → landscape-defining + modern applications
- Locally available roofing material → internationally traded commodity

Reconstructed Viking settlement (Museum Haithabu, D)

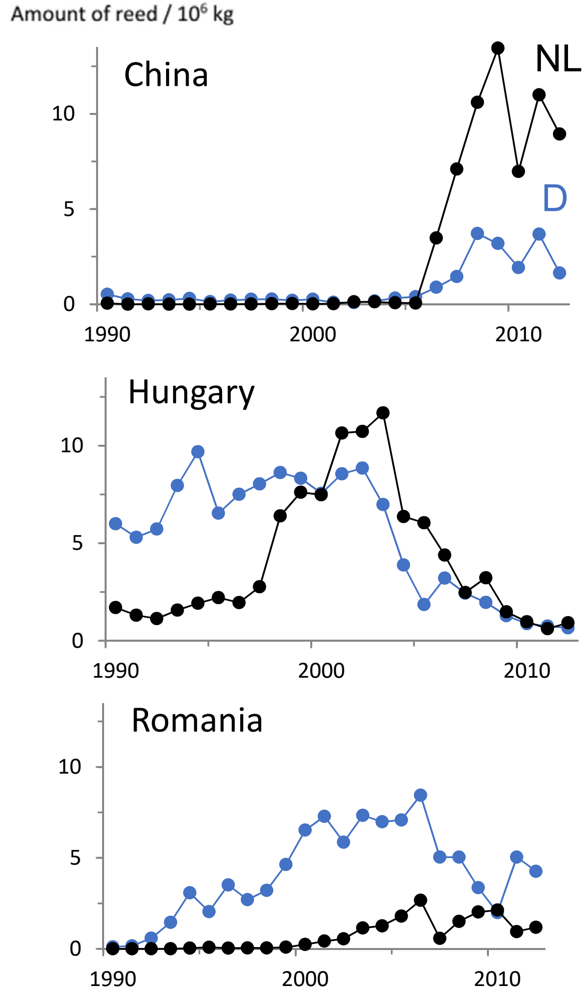
Reed thatched roof + walls (©Wadden Sea Centre, Ribe, DK)

# European market of thatching reed

Demand in EU: ca. 15 Mio bundles / year

NL, D, UK, DK → Import rate ca. 70-85%


**Exports: 1990 – 2012**




Wichmann & Köbbing 2015, Ind. Crops and Products

# Reed value chain and main actors


Thatching companies

Link between the raw material and the demand for thatched houses

# Survey among German thatchers

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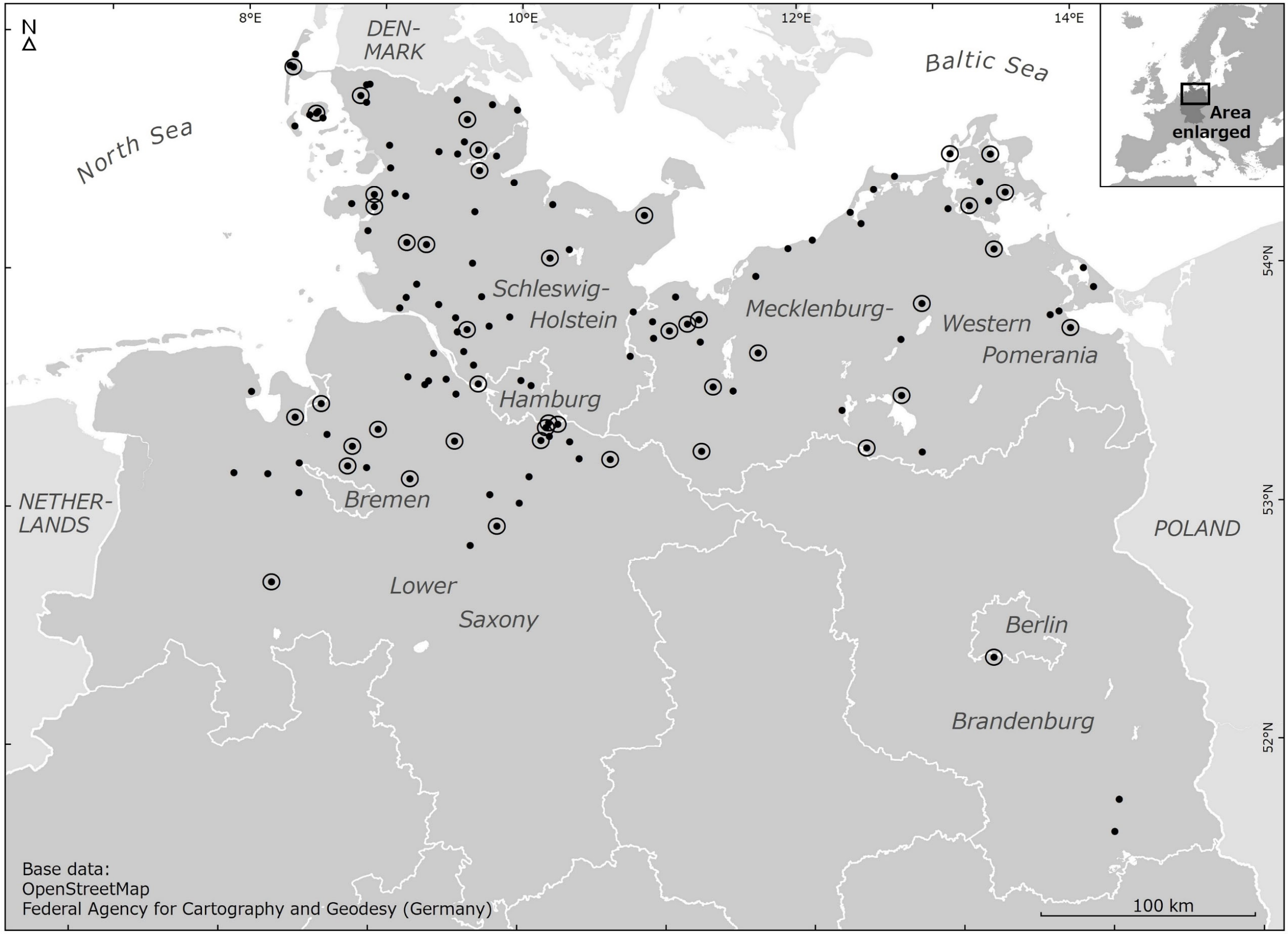
- Written survey in 2019
- Northern Germany:

  N= 141 companies
- Response rate: 33 %

→ first in-depth analysis of thatching reed market




*Becker, L., Wichmann, S., Beckmann, V. (2020). Resources 9 (12).*

# Responding thatching companies

- SME - Small and medium scale enterprises: self-employment to 28 full-time employees

- 62% specialized on thatching

- < 9% harvesting own reed
- 26% had given up reed cutting

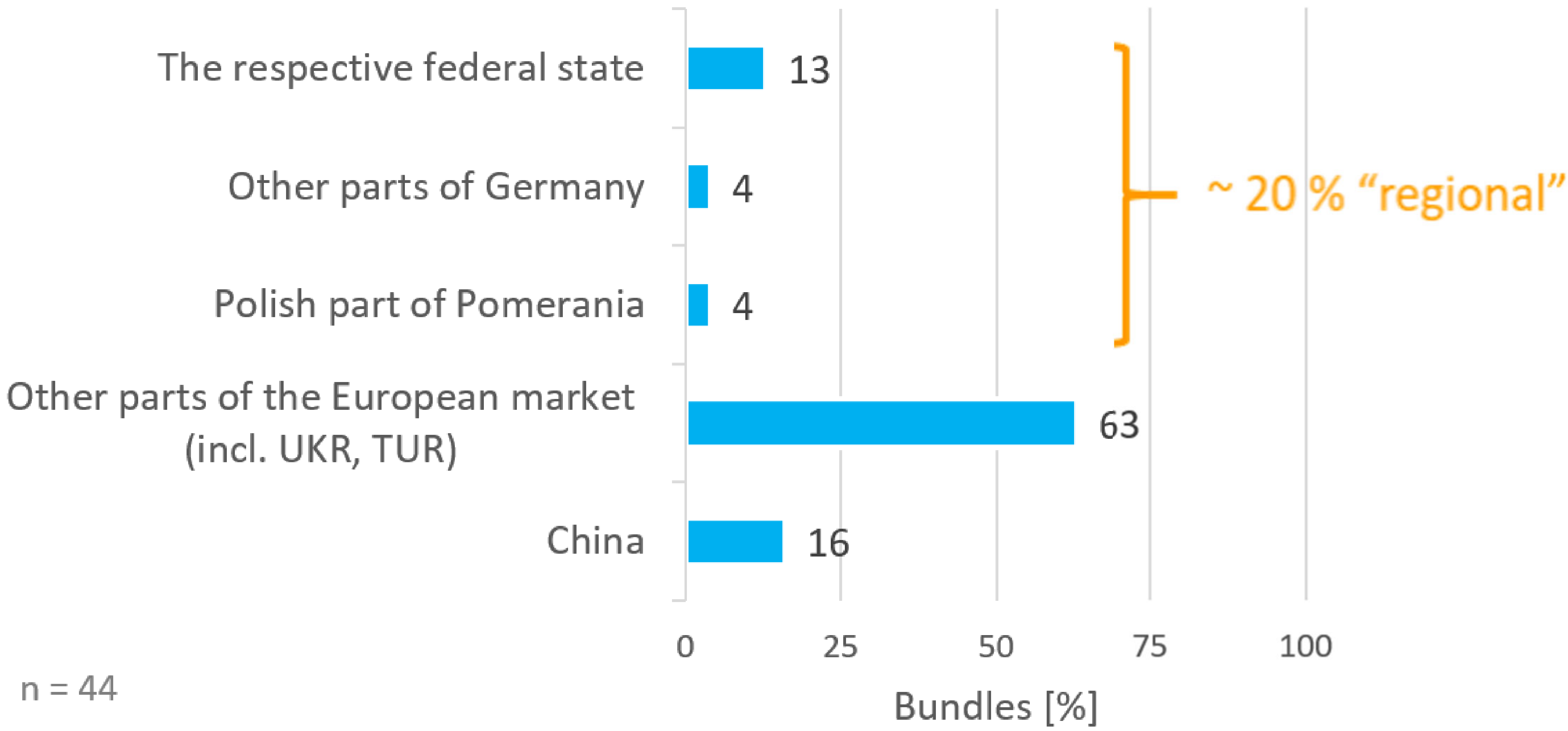
# Reed bundles used per company

- 2018: ~ 21,500 bundles per company
  (200-80,000 bundles)

- Utilisation of reed:

| | |
|---|---|
| Rethatching roofs completely | 59 % |
| Newly constructed roofs | 24 % |
| Roof repairs | 17 % |

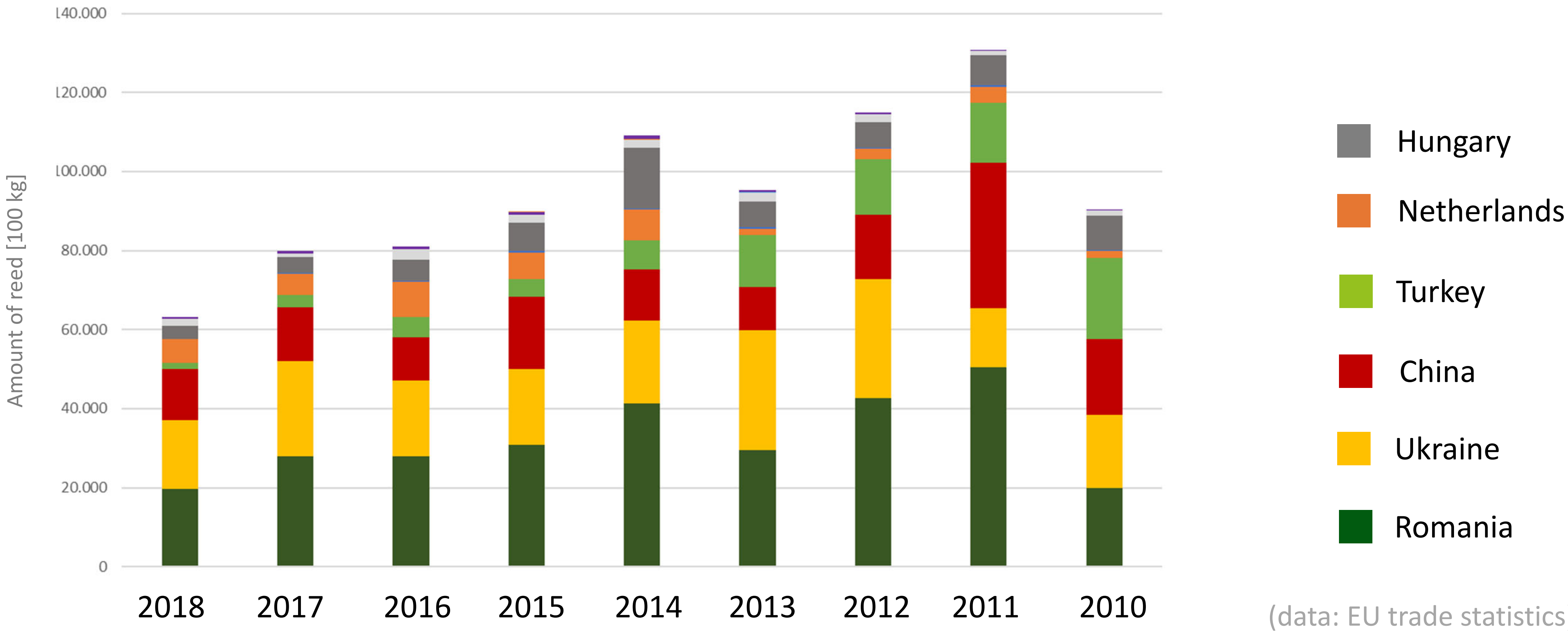
# Origin of reed used in 2018




n = 44

# Reed imports to Germany

## Total amount + share of partner countries varies



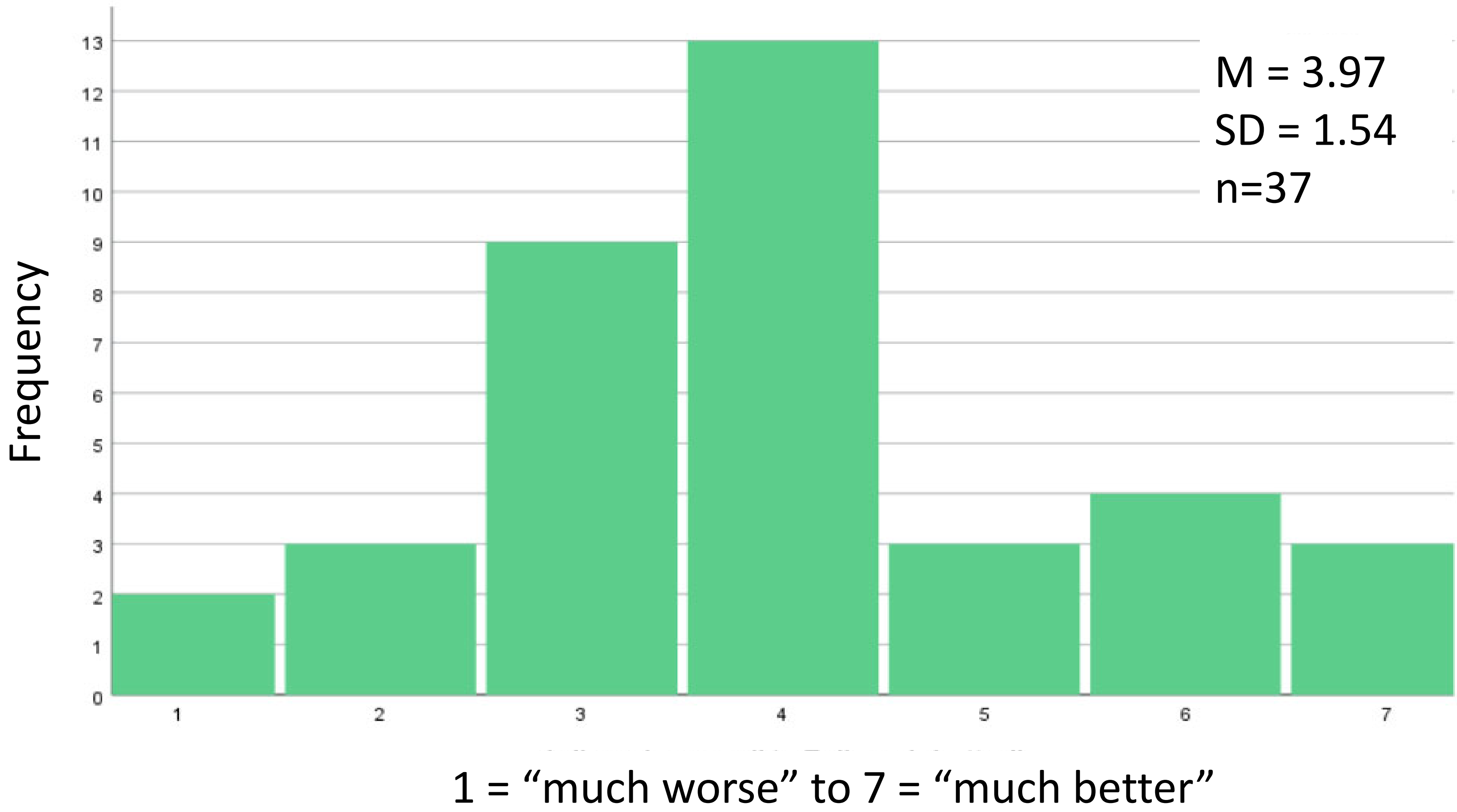

(data: EU trade statistics)

# Criteria when purchasing reed for thatching

| Criteria | Frequency | Percent |
|---|---|---|
| Quality | 46 | 100.0 |
| Cleanliness | 42 | 91.3 |
| Culm length | 40 | 87.0 |
| Breaking strength | 32 | 69.6 |
| Culm wall thickness | 26 | 56.5 |
| Origin | 25 | 54.3 |
| Price | 15 | 32.6 |
| Storage and transportation | 27 | 29.6 |
| Color | 9 | 19.6 |

n = 46

# Quality assessment of regional reed compared to other sources



# Regional reed: demand and promotion

## 1) Demand by Customers

Ø 34 % asked for reed of regional origin on their own (0 - 100%)

## 2) Promotion by thatchers

YES – only 30 % promoted regional reed

NO – reasons: insufficient supply (50%)

poor quality of reed (31%) → e.g. “too short” and/or “too soft” reed

## 3) Willingness to offer more regional reed

69 % (so far no promotion) and 86 % (already promoting)

# Extrapolation: reed market in Northern Germany (2018)

| | | Total market | Regional reed | Supply gap of regional reed |
|---|---|---|---|---|
| **Volume** | Million bundles | 3 ± 0.8 | 0.5 ± 1.4 | 0.5 ± 0.4 |
| **Value** | Million € | 11.6 ± 2.8 | 1.8 ± 0.5 | 1.9 ± 1.4 |

+/- indicates the sampling error for a 95% confidence interval

# Area demand

- For supply gap: 1.046 ± 784 ha
- For total market volume: ~ 6.000 ± 1.600 ha

→ max. 10,000 ha

> 1 Mio ha drained → other options of reed utilisation + further paludicultural crops

# Potential for paludiculture

- Current reed harvesting area is limited

  “not available”, “too small”, “very restricted use”, “nature conservation”

- Cultivating reed: improve quantity and quality of regional reed for thatching

- Research demand: How to achieve and improve thatching qualities of reed?

  → Session 4.2a: Genetics of Reed (Kristina Kuprina + Anna Rudyk)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# For further reading ☺

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