

Ethnoveterinary use of herbal mixtures in the treatment of livestock – a survey in Bavaria

Introduction

- Complex mixtures are common in Chinese traditional herbal medicine [1]
- **How common are mixtures in Western veterinary phytotherapy?**

Methodology

- In 77 semi-structured interviews 884 UR were recorded, comprising detailed information about plant species, plant part and further natural substances used, the manufacturing process for the end product, dosing, administration and therapeutic intention [2].

Results

- 159 UR described the use of mixtures (each contained between two and 19 ingredients (mean: 4))
- The mixture UR corresponded to 155 different plant species and 17 different natural substances (e.g. salt, sugar, propolis)
- Most frequently mentioned plant species in mixtures were:
Calendula officinalis L. (27 UR)
Salvia officinalis L. (24 UR)
Cinnamomum verum J.Presl (24 UR)
- Purchased products were used for 36% of the UR (Fig. 1)
- Table 1: Most popular mixtures among Bavarian farmers:

Product name	Number of plants contained	Number of UR	Indication
Popular purchased herbal mixtures			
ColoSan® SaluVet	4 plus Sulfur	12 UR	digestive disorders
Schweden-bittertrunk	up to 19	8 UR	skin (QD) or mastitis (QG52)
Popular selfmade herbal mixtures			
«Räucher - Mischung»	up to 6	7 UR	fumigation of the stable (GS, QR)
«Magen-Darm-Tee»	3 (anis-fennel-caraway)	5 UR	digestive disorders (QA)
«Erkältungs-tee»	3 (sage-ribwort-thyme)	4 UR	respiratory tract (QR)

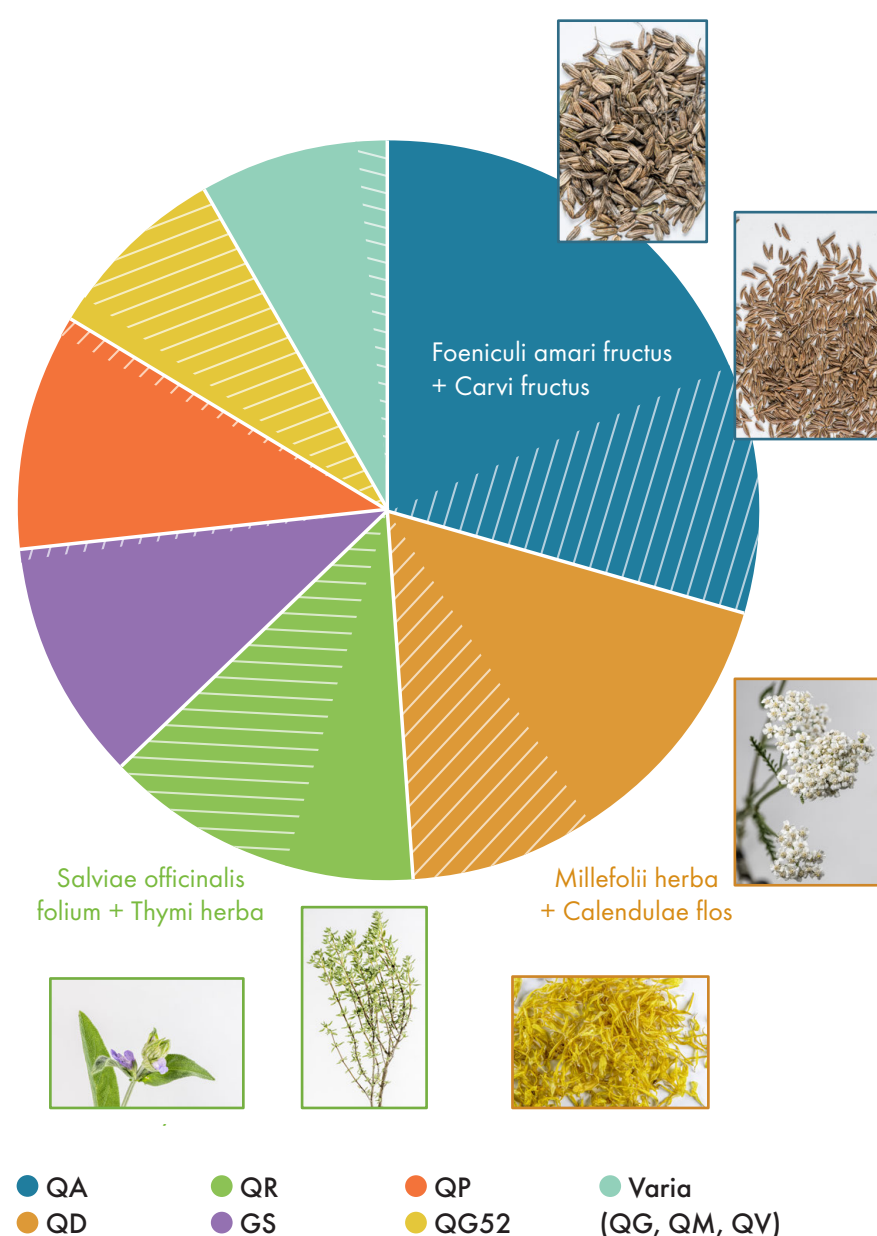


Fig. 1: Classification of the 159 mixture UR (out of a total of 884 UR) according to ATCvet codes incl. representation of the share of purchased mixtures (shaded area) and with the two most frequently reported drugs, respectively.

Conclusion

- In Bavaria (Germany), homemade herbal remedies are still known and actively used by farmers on large and small, organic and conventional farms.
- The use of herbal mixtures is reported less frequently than the use of single plants - but nevertheless 18% (159 UR) of all UR are mixtures.
- There is a high level of interest among Bavarian farmers in herbal mixture products for purchase (57 UR of 159 UR (36%).

Reference:

- [1] Lee K-H. Research and future trends in the pharmaceutical development of medicinal herbs from Chinese medicine. *Public Health Nutrition* 2000; 3.4a: 515-22.
 [2] Schlittenlacher, T., Knubben-Schweizer, G., Dal Cero, M., Vogl, C. R., Maeschli, A., Hamburger, M., & Walkenhorst, M. (2022). What can we learn from past and recent Bavarian knowledge for the future development of European veterinary herbal medicine? An ethnoveterinary study. *Journal of Ethnopharmacology*, 114933.

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