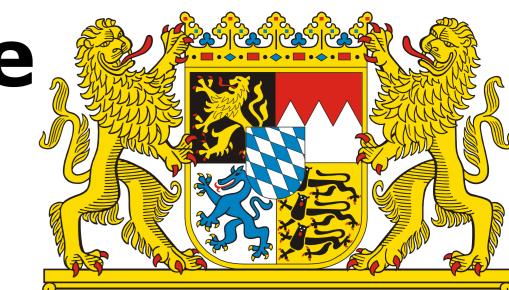


Bavarian State Research Center for Agriculture

Institute for Crop Science and Plant Breeding Hop Research Center Hüll



Ariana (ANA) – the New Huell Aroma Hop

Successful in Large Scale Field Trials and Brewing Trials A. Lutz, J. Kneidl, D. Ismann, K. Kammhuber and E. Seigner

Pedigree and Agronomic Features			
Pedigree	Herkules x male wild hop		
Advantages	vigorous homogenous growth, robust, cylindrical bine, good stature, good formation of side arms, very nice cones		
Disadvantages	large leaves		
Maturity	late (comparable to Herkules)		
Harvest	good pickability and good drying		
Climate Tolerance	robust, no early flowering, resilient to stress and drought		
Yield Potential	high		
Resistance towards			
Verticillium wilt	good		
Downy Mildew	good		
Powdery Mildew	resistant		
Botrytis	medium		

Chemical Compounds

Red Spider Mite

Hop Aphid

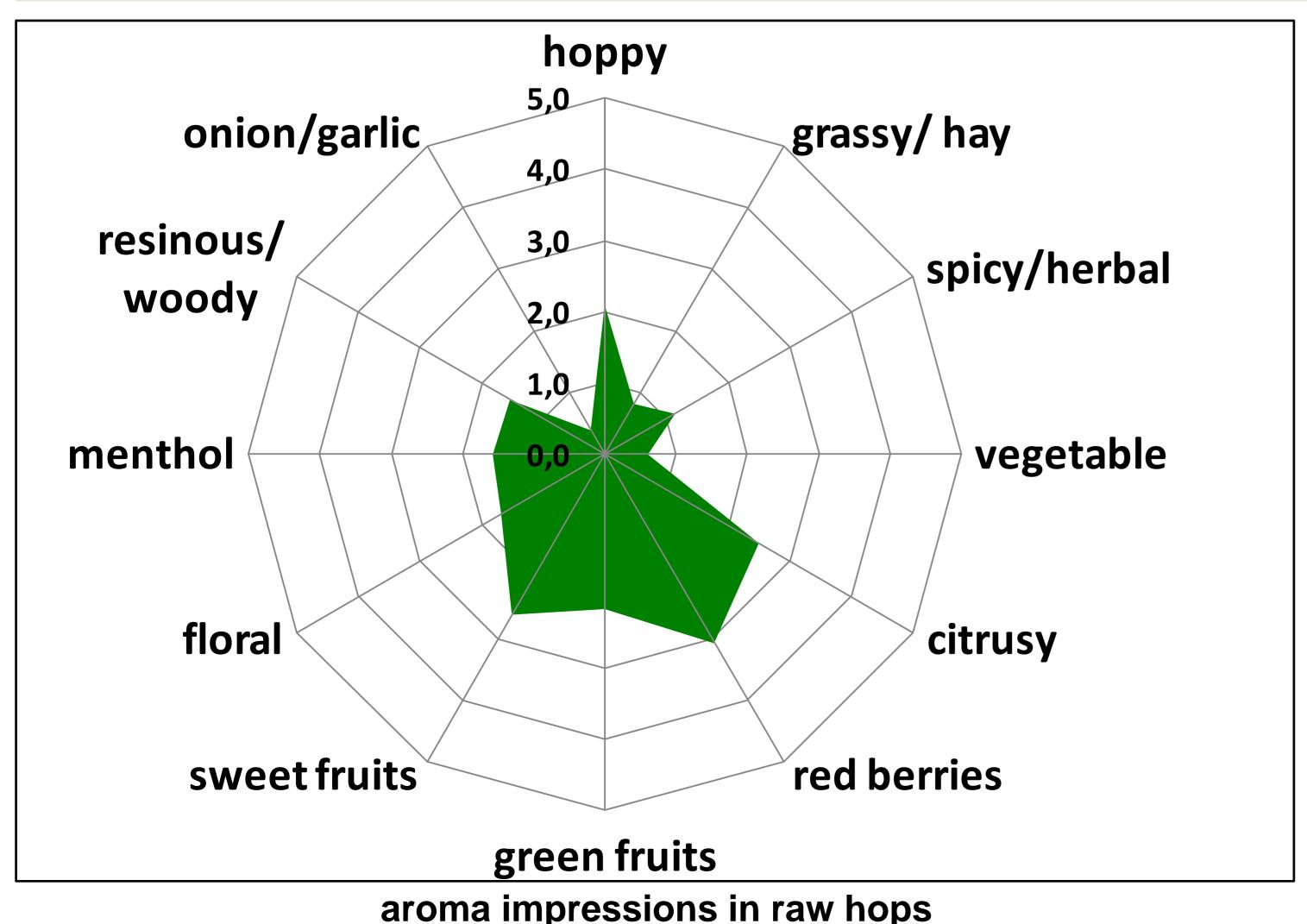
Bitter Substances (EBC 7.7):		
Alpha Acids (%)	10 (9 - 11)	
Beta Acids (%)	5.5 (4.5 - 5.5)	
Cohumulone (rel. in % of α -acids)	40 (37 - 42)	
Xanthohumol (%)	0.45 (0.4 - 0.5)	
Total Oil Content (EBC 7.10): ml/100 g hops	2.0 (1.5 - 2.3)	
Aroma Impression Raw Hops	pleasant, hoppy, red berries (blackcurrant), sweet fruits (peach, pear, tropical fruits), citrus, slightly resinous	

good

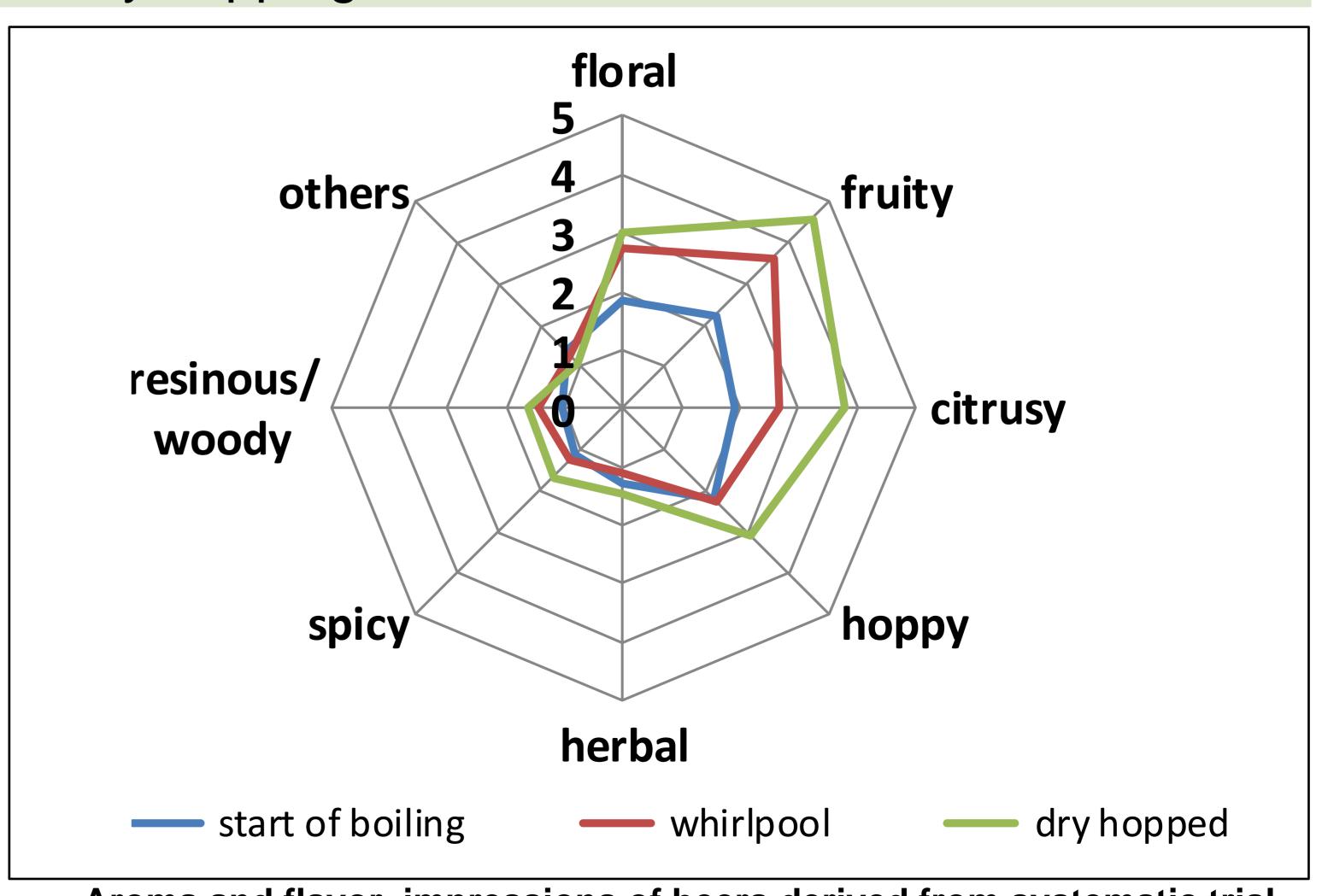
low – medium

Assessment based on Individual and Standardized Trial Brews

Depending on the beer type and dosage Ariana imparts various flavor notes to beer. This hop adds classical hoppy flavor as kettle hop or fruity characteristics of grapefruit, cassis, geranium, gooseberry, citrus and vanilla when used as late hop addition or for dry hopping.



aroma impressions in raw hops (mean values)



Aroma and flavor impressions of beers derived from systematic trial brews (mean values independent of beer type)