



Commercial Cider and Drinks Production: *An Advanced Seminar Series*

Programme: 10th – 14th December 2007

Venue: WSU Research Station, Mt. Vernon, WA

Seminar 1 Products for the Marketplace

Monday	09.00 – 12.30 Lecture & Workshop	<ul style="list-style-type: none">• Principles of marketing. Marketing strategies and plans• The product development process: Principles, steps and management. The consumer in NPD. Concept Testing. Market Research. Hedonic assessment methods.
	13.30 – 17.00 Workshop & Group Project	<ul style="list-style-type: none">• Product design: Specifications and recipes. Additives.• The package is the product: Packaging selection• NPD Team Project: Group brainstorming, scoping & development of product concepts, setting specific project objectives, resources & logistics. Consumer panels & hedonic assessment of products.

Tuesday	09.00 – 11.00 Lecture & Workshop	<ul style="list-style-type: none">• Downstream processing and packaging: Principles of plant layout & design. Equipment selection.
	11.00 – 12.30 Lecturer (<u>Visiting speaker</u>)	<ul style="list-style-type: none">• Marketing opportunities & challenges in the USA: Product positioning & differentiation. The consumer. Distribution. Developing marketing strategies.
	14.00 – 17.00 Workshop & Group Project	<ul style="list-style-type: none">• Downstream processing and packaging: Equipment selection (<i>continued</i>). Work schedules & operating procedures, health & safety, plant maintenance• NPD Team Project: <i>Continued.</i>

Wednesday	09.00 – 12.30 Lecture & Workshop	<ul style="list-style-type: none">• Business planning for cider & drinks production: Identification of costs & overheads. Performance indicators.• Quality Plans for cider & drinks production: Components of a quality management system, HACCP, QA during a product lifecycle, the Quality Manual, auditing, introduction to quality standards and accreditation.
	13.30 – 17.30 Field trip visit	<ul style="list-style-type: none">• Visit to a drink processing & packaging facility

Seminar 2 Cider & Perry: Sensory Analysis

Thursday	09.00 – 12.30 Workshop & Practical	<ul style="list-style-type: none">• Methods & application of sensory analysis: Sensory attributes of food & drink, types of tests, objectives of sensory analysis, biological basis, test conduct.• Flavour of cider and perry: Chemical components, sources & production of flavour characteristics.
	13.30 – 17.00 Workshop & Practical	<ul style="list-style-type: none">• Practical development of descriptive vocabularies: Profiling of cider & perry. Use of the Flavour Wheels and Attribute Tables• Organoleptic faults and off-flavours in cider & perry: Types, causes and prevention• Standardisation of descriptive vocabularies: Standardisation of terminology for profiling cider and perry• Practical development of descriptive vocabularies: <i>Continued.</i>

Seminar 3 Cider & Perry: Adding Value

Friday	09.00 – 12.30 Lecture & Workshop	<ul style="list-style-type: none">• Organic production: Standards. Processes, methods, equipment selection, ingredients & product specifications.• In-bottle fermentation: Processes, methods, materials & ingredients. Bottle conditioned products.
	13.30 – 15.30 Lecture & Workshop	<ul style="list-style-type: none">• Distillation: An introduction & overview.• Product range extension: Apple juice (“Soft Cider”) production & juice-based products – processes, methods & product specifications.

Please note the following:

- A course booklet is provided, but please also bring note-taking materials and, if you have one, a laptop.
- On Thursday, please bring any samples of cider or perry you have got or previously made for use in the sensory analysis sessions.
- Lunch (& more cider tasting!) will be provided on Friday.