



Session	TO-BE-START-UPS looking for Finance: pre-seed/angel/seed funding and/or partners
Title	FibraSolase: Enzymatic solubilisation of fibres
Company	The Protein Express
Speaker	Bas Raats & Wim de Laat
Keywords feedstock (max. 2)	Wheat Bran
Keywords technology (max 2)	Fermentation Enzymatic-hydrolysis
Keywords End-Product (max 2)	Enzymes, Predigested Fibres
Abstract:	
Soluble nutritional fibres are clearly in demand, especially for food and petfood (monogastric species). Various agro-residues could be a good source for such fibres. However, how to efficiently hydrolyse/solubilize these solid fibres in a low-cost manner? The Protein Express has developed a unique platform process employing a proprietary thermophilic platform fungus that has been used for 50+ years to produce food enzymes to produce a range fibre hydrolysing enzymes (FibraSolases). It involves a simple low-cost fermentation process during which the fungus grows on a fibrous matrix like wheat bran or sugar beet pulp or brewer's spent grains as well as distillers grains and solubles, and produces the enzyme cocktail of interest. By using this enzyme cocktail, containing 20+ enzyme activities, we can hydrolyse the same fibres to greater than 50% soluble dry matter. By doing this at a very high temperature, we can keep contamination low and produce food and feed grade materials with enhanced nutritional value increased natural colours, roasty reaction flavours. The resulting soluble fibre solutions are stable at 20-25% dry matter and viscosity is rather low. The concept is patented and will be marketed in a B2B mode by licensing the technology to producers of especially Food Ingredients and petfood producers. Some collaborations have already started. We are currently raising money (about 1.5 Meuro) to expand the team, address regulatory aspects and scale up to demo plant. Next to this we have developed our platform fungus into precision fermentation platform strain to produce genes of interest from any source.	