

LABORATORIUM KIMIA DAN BIOCHEMA PANGAN HASIL PERTANIAN (LABORATORY OF FOOD CHEMISTRY AND BIOCHEMISTRY)

No.	Tema sesuai ARN	Subtema sesuai ARN	Topik sesuai ARN	Agenda Riset	Perincian Penelitian	Jadwal Pelaksanaan			
						2012	2013	2014	2015
1	KETAHAN-AN PANGAN	PENGEMBANGAN INDUSTRI PANGAN SKALA KECIL DI PERDESAAN (<i>SMALL SCALE ON SITE RURAL INDUSTRY</i>)	Identifikasi ragam jenis dan kuantitas bahan baku lokal untuk pengembanga, industri pangan skala kecil di sentra produksi	Explorations of Tubers Processing Technology	Development of extraction and purification methods of tubers flour by physical and chemical techniques				
					Development of New Food and Drink Products tubers flour				
					Exploration of Bioactive substances of Tuber flour for Food Additive				
					The use of water soluble polysaccharide for Functional Foods				
					Exploration of waste of Tubers Processing for non food purposes.				
				Exploration of local resources as raw materials for small medium scale food industries	Chemical compositions and physical properties of local tubers, cereals, legumes, fruits, and vegetables				
				Developing flour processing					

					technology from local resources					
					Detoxification techniques of local food resources					
			Identifikasi dan standarisasi produk pangan olahan (produk antara dan produk akhir) sesuai dengan permintaan pasar	Developing national standardization for raw materials from local resources	Developing national standardization for flour from local tubers, cereals, and legumes					
		PENINGKATAN KUALITAS GIZI DAN KEANEKARAGAMAN PANGAN	Peningkatan kualitas gizi bahan pangan yang tersedia dan terjangkau oleh mayoritas konsumen	Explorations of Local Resources for Bioactive Productions	Identification of bioactives substances from local resources					
						The use of bioactive substances for antimicrobial, antitumor and anticancer studies.				
						The use of bioactive substances for anti degenerative diseases				
					Identification of food microstructure Food Micro-structure and Food Component Interaction by	Effect of food processing to microstructure of food component				
						Food component interactions analyzes				
						Studies of Food mixture				

				Advance Food Analysis	polymers				
				Developing Functional Food	Developing of food rich in antioxidant				
					Developing of bioactive enriched food				
					Developing of food and drinks rich in fiber				
				Utilization of Food Enzyme for Food Productions	The use of food enzyme for food processing				
				Developing high nutritive foods	Identification of local resources for nutrification				
					Developing nutrient fortified and enriched foods based on local resources				
					Food formulation for malnutrition				
					Functional foods for improving nutritional status				
					Nutrients fortification and enrichment of conventional foods				

				Developing non rice based food for food diversification	Produk pangan lokal non beras untuk percepatan diversifikasi pangan				
		PENGURANGAN KEHILANGAN HASIL (YIELD LOSSES)	Pengembangan teknologi untuk memperkecil kehilangan hasil pada tahap pasca-panen tanaman, ternak, dan ikan	Technology for native enzymes inhibiting from plant food, husbandry and fisheries	Developing enzyme inhibition techniques to enhance food quality				
				Inhibition of fresh food deterioration	Application of natural preservatives to inhibit food deterioration				
2.	PENINGKATAN KESEHATAN MASYARAKAT	PENINGKATAN STATUS GIZI MASYARAKAT	Pengembangan bahan kimia alami sebagai alternatif dari bahan baku kimia sebagai antibiotik atau pengawet pada produk pangan	Natural preservatives for food products	Extraction, identification, and structure elucidation of natural preservatives				
		TEKNOLOGI PRODUKSI BAHAN BAKU OBAT	Pencarian senyawa aktif baru (<i>new chemical entities/NCE</i>) untuk pengembangan	Exploration of natural drug candidate from local resources	Extraction, identification, and elucidation structure of drug candidate from local resources				
					Integrative processing of local resources as foods and drug candidates				

			obat		Application of drug candidate compounds from local resources for diseases prevention and treatment					
		PENGEMBANGAN PRODUK FITOFARMAKA	Pengembangan teknologi produksi ekstrak terstandar dari tanaman obat, sebagai bahan baku fitofarmaka	Exploration of natural drug candidate from local resources	Extraction, identification, and elucidation structure of phyto pharmaceutical from local resources					
					Integrative processing of local resources as foods and phyto pharmaceutical					
					Application of phyto pharmaceutical compounds from local resources for diseases prevention and treatment					
3.	MATERIAL MAJU		Pengembangan bahan material pengawet ikan dan hasil laut lainnya yang aman bagi kesehatan manusia dan menggunakan bahan baku lokal	Developing of preservatives from local resources	Extraction, identification, and elucidation structure of preservatives from local resources					

				Application of local resources based preservatives for fishery products				
				Safety aspects of local resources based preservatives				
		Pengembangan teknologi material untuk pengawetan dan teknologi kemasan untuk produk pangan hasil tanaman, ternak, dan ikan	Developing of packaging for food preservation	Developing of smart packaging				
				Developing of eco-friendly packaging				
				Developing of edible film and edible coating				
		Pengembangan teknologi material untuk menjaga produksi pangan segar dan olahan yang aman dan bermutu	Developing of material for fresh products	Developing material for modified atmosphere packaging				
		Introduksi teknologi material baru untuk meningkatkan efisiensi asupan gizi masyarakat	Developing high bio-available nutritive food compounds	Developing high bio-available proteins, carbohydrates, minerals, vitamins, and bioactive compounds				