



Australian Government

Australian Centre for International Agricultural Research

Farmers' Gourmet



PHOTO: VU BAO KHANH

Greetings from ACIAR



PROF. ANDREW **CAMPBELL**
Chief Executive Officer, ACIAR

Dear Readers,

If you are a Vietnamese food lover, interested in nutrition and farmers' livelihoods, this little book will be a real treat for you.

In Farmers' Gourmet you will find 15 Vietnamese recipes selected and co-developed by chef Nguyen Manh Hung, along with farmers and scientists from Vietnam projects funded by the Australian Centre for International Agricultural Research (ACIAR). These fine dishes are designed to be very easy to cook at home.

These dishes are associated with areas where local farmers and scientists from Vietnam, Australia and international research organisations have worked together through research partnerships to improve the crops, livestock, forestry and aquaculture sectors across Vietnam, from the North West to the South Central Coast, and the Mekong Delta regions.

These research collaborations have made a real difference in agriculture, fisheries and forestry. Research has helped to support safe, nutritious food for consumers as well as create better incomes

for farmers, helping them become more resilient to climate change, enabling them to engage with private sector, or even creating a good base for development of an entirely new industry.

To deliver the Farmers' Gourmet to you for the 25th anniversary of ACIAR in Vietnam, I understand that chef Nguyen Manh Hung, photographer Vu Bao Khanh and our wonderful ACIAR Vietnam office staff, especially communications specialist Pham Bich Thuy have worked very hard, and had a lot of interesting cooking experiences with farmers and researchers. Thank you for helping to tell the story of ACIAR Vietnam in such a special way!

I will try to cook these dishes to treat my family and friends. How about you? Please enjoy the Farmers' Gourmet, and join me in wishing Vietnamese farmers and agriculture every success.

I am very proud of ACIAR's work over the last 25 years in Vietnam, and I look forward to the next 25 years with great optimism and enthusiasm.



Everyone can cook!



NGUYEN MANH **HUNG** (Hungazit)
Chef

Dear Readers,

The cookbook 'Farmers' Gourmet' provides 15 simple dishes from all over Vietnam. The recipes are inspired by produce, farmers and researchers from the projects funded by ACIAR. As a professional chef, I am very delighted to work with ACIAR to develop this book.

We met with farmers and used the fresh ingredients grown in their own farms to cook traditional Vietnamese dishes. I believe that the key to delicious dishes is respecting the ingredients and the people who grow them. I have travelled to different regions and witnessed how the ingredients are made by the farmers. It takes a lot of hard work and determination to produce food for our consumption.

In this cookbook, some recipes are provided by farmers and researchers participating in the ACIAR projects. Some are traditional recipes that have been passed down through generations and still cooked daily. Adding a touch of professional

cooking techniques, I tried to refine those recipes to create the most suitable dishes for you.

'Farmers' Gourmet' is not just a cookbook but also a story about how healthy and nutritious agriculture products are made, about the people behind them, and the long-term partnership between Vietnam and ACIAR in agricultural research.

I am proud to know that Vietnamese farmers are able to produce high-quality and safe agricultural products. My partner - photographer Vu Bao Khanh and I are very honoured to contribute to this book. We do hope that the love for food and fresh ingredients could be conveyed to you through this book.

I hope that everyone can cook at home with this book from appetiser to dessert recipes. I wish for every kitchen to be cozy, dining tables to be filled with laughter and happy eyes to be present for a good meal after a hard-working day. I wish you happiness and success with the dishes.

Acknowledgements

ACIAR would like to sincerely thank the below individuals and organisations who contributed to and supported the making of this book:

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Ms Huynh Trach Tra My – Can Tho University

Dr Nguyen Dinh Quang Duy – Research Institute for Aquaculture 3

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Mr Nguyen Minh Duong – Research Institute for Aquaculture 2

ACIAR project *‘Towards more profitable and sustainable vegetable production systems in north-western Vietnam’*
(AGB/2012/059)

ACIAR project *‘Improving livelihoods in Myanmar and Vietnam through vegetable value chains’* (AGB/2014/035)

ACIAR project *‘Improving smallholder incomes in the north-western highlands of Vietnam by increasing access and competitiveness in regional temperate and subtropical fruit markets’* (AGB/2012/060)

ACIAR project *‘Enhancing bivalve production in northern Vietnam and Australia’* (FIS/2010/100)

ACIAR project *‘Sustainable and profitable crop and livestock systems for south-central coastal Vietnam’*
(SMCN/2007/109)

ACIAR project *‘Improving the sustainability of rice-shrimp farming systems in the Mekong Delta, Vietnam’*
(SMCN/2010/083)



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Stir-fried H'mong Mustard Greens with Pork

Ingredients

500 g	H'mong mustard greens
200 g	pork belly
½ tbsp	lard
3 cloves	garlic
1 tsp	sugar
1 tbsp	soy sauce
½ tbsp	oyster sauce
	pepper

Recipe provided by the ACIAR project 'Towards more profitable and sustainable vegetable farming systems in North - Western Vietnam' (AGB/2012/059).

Method

- Slice the pork belly into bite-sized pieces, heat the cooking pan over medium-high temperature and stir-fry the pork belly until the fat from the pork melts off and the meat turns into caramelised colour.
- Add minced garlic into the pan to stir-fry with pork belly until the garlic release its aroma and turns into golden colour.
- Chop fresh mustard greens into five-centimetre pieces then add into the pan and stir-fry over maximum heat until greens are tender. Season to taste with pepper, soy sauce and oyster sauce before removing from the pan. Ready to plate and serve.



Fast facts

H'mong mustard greens are the special indigenous vegetables of H'mong people in North West Vietnam. Ideal climate conditions have helped farmers produce high-quality and safe-to-eat H'mong mustard greens.

H'mong mustard greens have a distinct taste which is a bit bitter when tasted at first but a sweet flavour soon follows. H'mong mustard greens are considerably rich in vitamins B and C as well as beta-carotene.

Researchers consider H'mong mustard greens similar to the quality of Australia's rocket plant (*Eruca sativa*).

H'mong mustard greens are in peak season from September to February.

Vegetable Soup with Pig Skin

Ingredients for the broth

500 g	chicken bones
3 cloves	red shallots
1 knob	ginger
2	scallions

Ingredients for the soup

50 g	carrots
50 g	kohlrabi
100 g	broccoli
50 g	snow peas
50 g	mushrooms
100 g	dried pig skin
10	quail eggs
	coriander
	pepper, salt, fish sauce, sugar

[Recipe by Chef Nguyen Manh Hung]

The broth

- Grill red shallots and ginger on a charcoal grill until fragrant.
- Add 2 litres of water, 500 grams of chopped chicken bones, red shallots, sliced ginger and spring onions in a saucepan and bring to boil.
- Simmer for 1.5 to 2 hours for the broth to be flavoursome.

The soup

- Slice carrot and kohlrabi into bite-sized pieces.
- Soak the sheet of dried pig skin in warm water until it softens. Crush the ginger for juice and mix the ginger juice with wine. Squeeze the pig skin into the mixture. Wash the pig skin again. Chop into bite-sized pieces and set aside.
- Boil quail eggs for 4 minutes, peel and set aside.
- Add 1 litre of chicken bone broth into the saucepan and boil.
- Add carrot, kohlrabi, snow peas, mushrooms, broccoli and the chopped pig skin into the saucepan and cook for about 30 seconds, then remove all items from the saucepan and place them with the quail eggs in a bowl. Marinate the soup with fish sauce, salt and a little sugar and pour the soup into the bowl.



PHOTO: VU BAO KHANH

About the dish

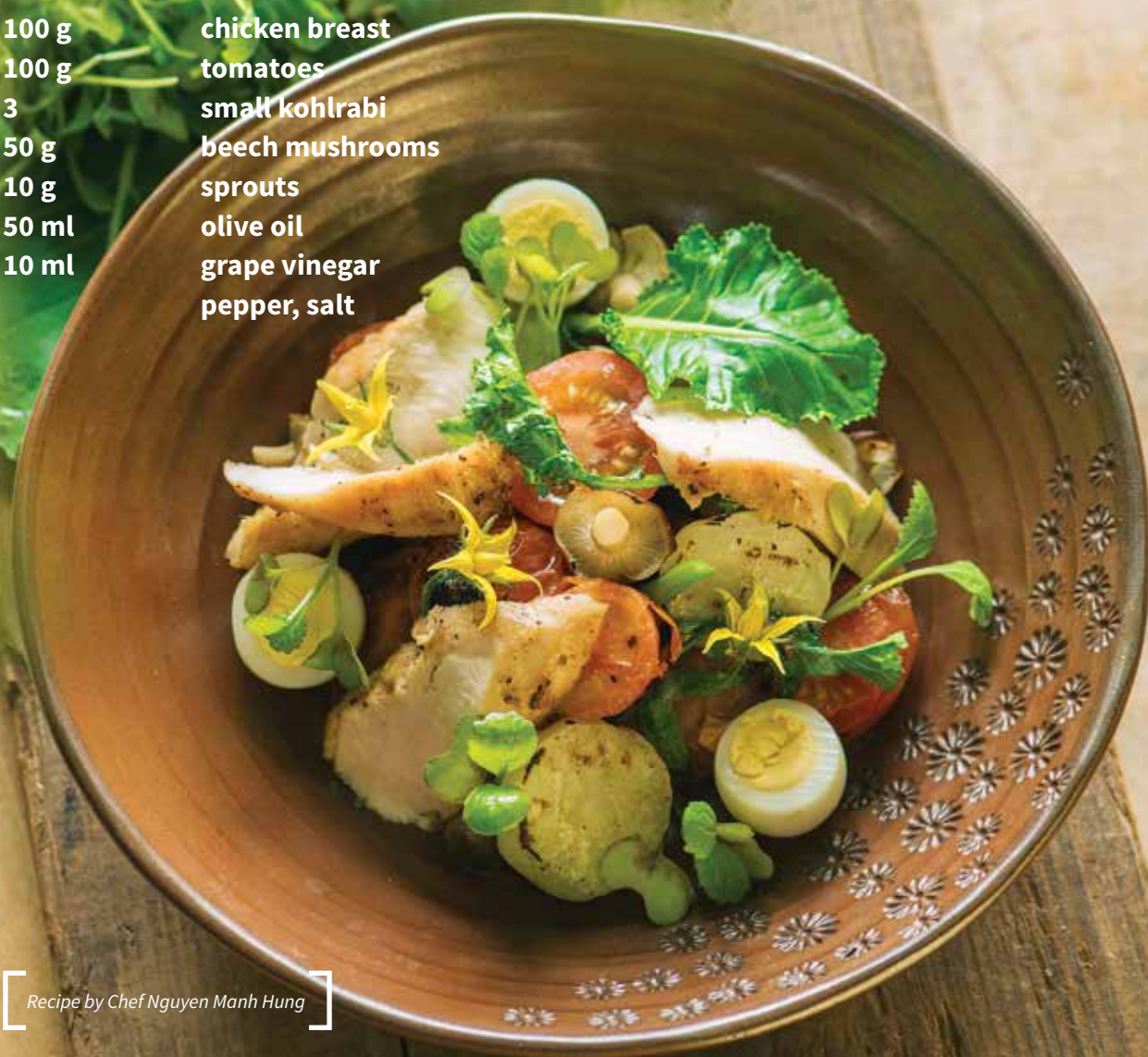
Vegetable Soup with Pig Skin is a traditional dish in Hanoi. This dish is usually cooked for feast days or Tet holiday. Its bright colours, fresh taste and sophisticated way of cooking manifests the delicacy of Vietnamese traditional cuisine.

Thanks to ACIAR projects which help to link North West farmers to big markets, people in Hanoi now can use safe vegetable ingredients from the North West to make delicious food.

Grilled Chicken and Vegetable Salad

Ingredients

100 g	chicken breast
100 g	tomatoes
3	small kohlrabi
50 g	beech mushrooms
10 g	sprouts
50 ml	olive oil
10 ml	grape vinegar
	pepper, salt



[Recipe by Chef Nguyen Manh Hung]

Method

- Cut tomatoes in half. Peel off the outermost layer of the kohlrabi and cut in half. Clean and prepare the beech mushrooms and drain. Place all prepared ingredients on a plate. Mix well with olive oil, pepper and salt.
- Marinate chicken breast with olive oil, pepper and salt.
- Turn on the grill at the highest temperature. Grill the two sides of the chicken quickly on the hot grill then place it on a plate to rest for 5 to 7 minutes. Grill the chicken again for about 10 minutes at medium heat until cooked. Note: Do not over-cook otherwise the chicken will go dry. Let the chicken rest for 5 minutes and then cut into bite-sized pieces.
- Grill vegetables until they are cooked. In a mixing bowl, gently toss grilled vegetables with olive oil, grape vinegar and the chicken. Serve with sprouts.



IMPROVING FARMERS' INCOME THROUGH MARKET LINKAGES



PHOTO: VU BAO KHANH

Chef Nguyen Manh Hung and Ms Nguyen Thi Luyen prepare the ingredients for the Vegetable Soup with Pig Skin dish. Ms Nguyen Thi Luyen is one of the first farmers to participate in an ACIAR vegetable project funded in Moc Chau district, Son La province. Ms Luyen is the chairwoman of the Tu Nhien Safe Vegetable Cooperative with nearly 40 members. The cooperative, along with three other cooperatives in Moc Chau and Van Ho districts, with 87 farmers under the auspices of the ACIAR vegetable projects, are supplying safe vegetables for outlets and supermarket chains in Hanoi.

Economic development and income improvement for Vietnamese farmers is a fundamental and long-term goal of the ACIAR Program. All projects, regardless of the field of study, are directed towards this goal.

Since 2008, vegetable research teams have conducted four major projects in Lao Cai and Son La provinces, working with farmers to produce high quality and counter-seasonal vegetables for tourists, markets in Hanoi, Quang Ninh and other provinces.

For each hectare of safe vegetables, a farmer can earn 150 million VND a year on average. This is seven times higher than what farmers can earn from growing rice and maize on the same area. Accredited vegetable farmers in Moc Chau and Van Ho (Son La province) are eligible to use the ‘Moc Chau Safe Vegetable’ trademark, which have been developed as part of the counter-seasonal vegetable project. At present, there are about 200 households involved in growing

vegetables from ACIAR projects. There is great potential for expanding the vegetable growing model, creating new jobs and bringing benefits for many different people involved in vegetable value chains.

ACIAR’s research on agricultural economics and agribusiness over the past ten years has implemented thirty two projects valued at A\$ 10.8 million. These efforts have not only focused on agriculture, but also included forestry, aquaculture and animal production. This research works to identify and develop new market opportunities that can benefit smallholder farmers, and explores ways to encourage linkages and cooperation between farmers and markets through different businesses along value chains. It also aims to develop farming systems that are sustainable in the long term, that not only increase farming family incomes, but produce safe high-quality food that meet the demands of emerging markets and consumers.

ACIAR Project:

AGB/2006/112, ‘Increasing the safe production, promotion and utilisation of indigenous vegetables by women in Vietnam and Australia’; AGB/2012/059, ‘Towards more profitable and sustainable vegetable production systems in north-western Vietnam’; AGB/2009/053, ‘Improved market engagement for counter-seasonal vegetable producers in North West Vietnam’; AGB/2014/035, ‘Improving livelihoods in Myanmar and Vietnam through vegetable value chains’.

Grilled Chicken with *Zanthoxylum rhetsa* Seeds

Ingredients

1.2 - 1.5 kg a whole chicken

Marinade

1 tbsp roasted *zanthoxylum rhetsa* seed
1 chilli pepper
2 lemon leaves
2 tsp salt
1 stalk lemon grass

Spices (Jim Jaew)

1 tsp roasted *zanthoxylum rhetsa* seed
1 tsp salt
1 chopped chilli
20 g chopped cilantro
3 cloves garlic
1 stalk lemon grass, sliced
1 lemon

[Recipe by Chef Nguyen Manh Hung]

Method

- Clean the chicken. Remove the head and feet. Use knife or scissors to cut open the chicken. Flip the chicken over and press the chicken down
- Grind all of the marinade ingredients in a blender. Take the marinade mixture out and spread it evenly onto the chicken from the outside to the inside. Leave the chicken marinated for 10 minutes and then put the chicken on bamboo skewers or a grill pan.
- + *Grill using charcoal:*
Light the fire and heat the charcoal grill for 10 minutes at medium temperature before starting to cook. Wait until the charcoal turns to grey ash in colour. Place the chicken 15 centimetres away from the charcoal surface. Flip the chicken continuously so that the two sides turn a nice brown colour without burning. Depending on the chicken (big or small), calculate the time to grill accurately. For a chicken of 1.2 kilograms, it should be cooked for 40 to 45 minutes. Check whether the chicken is cooked by using a bamboo skewer and poke it into the thigh, if the water running out of the chicken is red, it is uncooked.
- + *Grill using oven:*
While marinating the chicken, turn the oven to 180°C for 15 minutes prior to cooking. When the oven is ready, place the chicken into the oven for 40 minutes.
- Prepare the spice mixture for dipping: add all ingredients for Jim Jaew except the lemon into a mortar. Use the pestle to grind the ingredients until it becomes soft and mixed evenly. Squeeze the lemon into the sauce then serve with the grilled chicken.

Fast facts

Grilled chicken is a traditional dish for ethnic minorities in North West Vietnam. *Zanthoxylum rhetsa* is a wild plant in the *Rutaceae* family and has an essential oil and aroma. The fruit is dark brown while the seeds are shiny black and taste like pepper. *Zanthoxylum rhetsa* seeds are spicy but the taste of the seeds from the North West is more pungent than pepper and chilli. This is the reason why the dishes marinated with *zanthoxylum rhetsa* seeds always bring out the taste of the North West as the seeds are nowhere else to be found.

In addition to grilled chicken, *zanthoxylum rhetsa* seeds are also used as a condiment for grilled buffalo meat or fish which are traditional dishes of the North West. *Zanthoxylum rhetsa* seeds are also the main spice to make Jim Jaew - the spice mixture for dipping, as used in recipe above.



PHOTO: VU BAO KHANH



North West landscape

NORTH WEST VIETNAM – ‘MOUNTAINS OF OPPORTUNITY’



North West Vietnam is a region with rich socio-cultural diversity, breathtaking natural landscapes and great agricultural potential. The region is located within the reach of some of the largest and fastest growing agricultural and consumer food markets in the world.

However, poverty, food insecurity and malnutrition in this region remain high and persistent, especially in the numerous ethnic minority communities. In addition, natural landscapes and potential for agricultural is threatened by unchecked degradation of land and water resources.

In the past 25 years, ACIAR has supported agricultural research cooperation with Vietnamese agencies in crop nutrition and land management, animal husbandry, forestry, agroforestry, agricultural economics and agricultural policy. In the past 10 years, ACIAR's activities have been focused on the North West.

In November 2017, ACIAR organised the 'Mountains of Opportunity' workshop to share knowledge from research projects related to the North West.

Details and documents of the workshop can be found at: <https://northwestsymposium.wordpress.com>

Oyster Soup with Pineapple and Tomato

Ingredients

100 g	fresh oyster meat
1 litre	fish or chicken broth
70 g	pineapple
5 g	scallions
10 g	Vietnamese mint
3	tomatoes
3 cloves	red shallots
1 tbsp	lard
1 tsp	sugar
2 tbsp	fish sauce
1 tsp	salt

Recipe by Mr Pham Hong Nhiem from ACIAR project
'Enhancing bivalve production in northern Vietnam &
Australia' (FIS/2010/100), refined by Chef Nguyen Manh Hung.

Method

- Cut the tomatoes into wedges. Slice red shallots. Slice pineapple.
- Preheat the pot at a medium-high temperature. When the pot is hot enough, add a tablespoon of lard into the pot. Add sliced red shallots and stir evenly.
- Add tomatoes and stir evenly until the tomatoes are soft.
- Add the fish or chicken broth into the pot and boil.
- Add pineapples and cook for 5 minutes.
- Put oyster meat into a strainer and put it into the boiling pot for 10 seconds. Remove the oyster and set aside in a bowl. It takes really short time for oyster to be cooked so it should not be left in boiling water for too long.
- Season the soup to taste with fish sauce, salt and sugar before ladling into the bowl containing the oysters. Then sprinkle sliced scallions and Vietnamese mint on top to decorate.



Grilled Oyster with Scallion Lard Mix

Ingredients

6	oysters
2 tbsp	lard
3 cloves	red shallots
5 g	scallions
20 g	Vietnamese mint
20 g	ground peanuts
	pepper, salt

Recipe by Mr Pham Hong Nhiem from ACIAR project
'Enhancing bivalve production in northern Vietnam &
Australia' (FIS/2010/100), refined by Chef Nguyen Manh Hung.

Method

- Wash oysters with a brush to remove residue on the shell. Slice red shallots, scallions and Vietnamese mint. Roast and crush ground nuts.
- Preheat the pan at medium temperature, then add the lard onto the pan until it is hot enough. Add red shallots into the pan and stir until fragrant then add scallions. Pour this mix into a bowl and set aside.
- Prepare the grill (can use charcoal or gas grill). Place oysters on the grill.
Note: There is a lot of water inside the oysters but water will be released when grilled and can be drained.
- When the oyster meat has shrunk, spread the shallot mix over the oyster meat.
Note: Make sure there is enough shallot mix to spread over the oyster.
- Sprinkle Vietnamese mint and roasted groundnuts before removing the oyster from the grill. Serve on a plate and enjoy.



PHOTO: VU BAO KHANH

Researcher Mr Pham Hong Nhiem and Chef Nguyen Manh Hung are cooking on an oyster raft of ACIAR project 'Enhancing bivalve production in northern Vietnam & Australia' (FIS/2010/100)

OYSTER FARMING – DEVELOPING A NEW INDUSTRY

Australia's expertise in bivalve molluscs has helped Vietnam develop a rapidly growing industry, with a large participation from coastal communities.



Workers classifying oysters, Quang Ninh, Vietnam.

PHOTO: PHAM BICH THUY

Prior to 2007, oyster farming in Vietnam was not established. Now, Vietnam produces more than 15,000 tonnes of oysters annually and oyster farming has spread nationwide. Demand for oysters in the domestic market has increased rapidly, and has great potential for export. The rapid development of oyster farming has been driven by the contribution from ACIAR's fisheries research program.

In 2007, the Research Institute for Aquaculture No. 1 (RIA1) of Vietnam focused on high value species and production, such as oysters and clams, and sought access to Australia's expertise in this area. Over the next few years, ACIAR facilitated exchange visits between the two countries, providing the opportunity for technicians from the RIA1 hatchery to visit the Port Stephens Fisheries Institute in New South Wales to learn algae cultivation techniques, oyster breeding and hatchery techniques. In parallel, the ACIAR-funded project helped to upgrade Vietnam's oyster hatcheries and

develop simple farming systems that were easily accessible by farmers.

Currently, it is estimated that 70% of oysters in Vietnam are raised by smallholder farmers in coastal areas, especially in Hai Phong and Quang Ninh. A number of big commercial companies have also seized the opportunity in this sector, and now there are private farms specialising in commercial seed production. Oyster farming has created about 3000 jobs, including those working in processing and marketing sectors.

ACIAR is continuing to support the enhancement of the quality of oysters in Vietnam by developing a selective breeding program to provide faster-growing and more resilient stock to the hatcheries. In addition, water quality monitoring programs are being implemented with the aim of growing the industry and ensuring food safety and the environment.

The development of oyster farming and processing in Vietnam is a great success story for both Vietnam and Australia.

ACIAR Project:

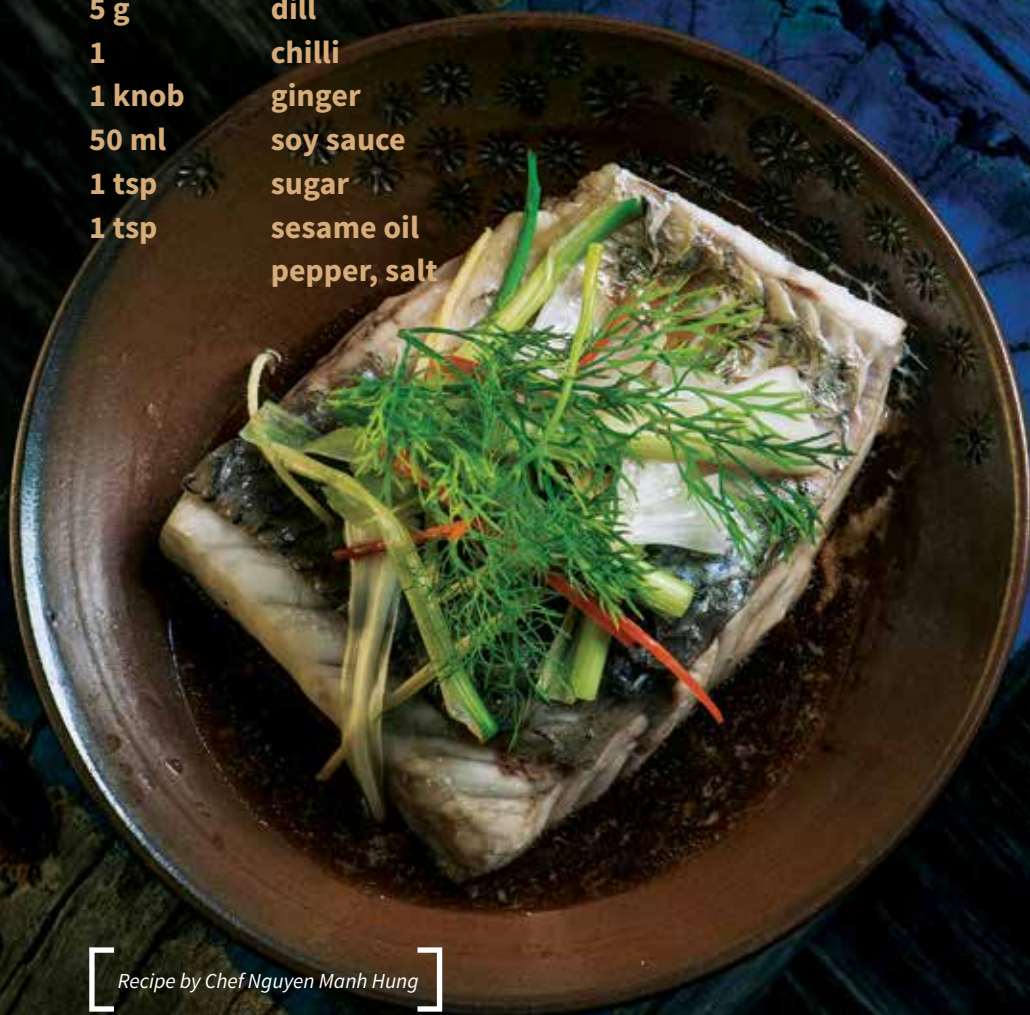
FIS/2010/100, 'Enhancing bivalve production in northern Vietnam & Australia';

FIS/2005/114, 'Building bivalve hatchery production capacity in Vietnam and Australia'.

Steamed Barramundi with Soy Sauce

Ingredients

300 g	whole barramundi
2	spring onions
5 g	dill
1	chilli
1 knob	ginger
50 ml	soy sauce
1 tsp	sugar
1 tsp	sesame oil
	pepper, salt



[Recipe by Chef Nguyen Manh Hung]

Method

- Pour water into a wok or stockpot and set a steamer in the wok or on the rim of the stockpot. Bring the water to a boil over high heat. Ensure that the water is boiling to the point of providing enough steam for the fish to be cooked.
- Julienne spring onions (both green parts and bulbs), ginger and chilli. Trim and chop the dill. Place spring onions, ginger, chilli and the dill into a bowl of iced water to serve later with the fish.
- Rinse the fish in cold water and pat dry with paper towels. Use a knife to cut the skin to make a cross-shaped groove so that the marinade can evenly penetrate and make the fish more attractive when served. Sprinkle a little pepper and salt on the fish. Leave for a few minutes.
- Add soy sauce, sugar, half a teaspoon of salt and sesame oil into the bowl. Use chopsticks to stir evenly. Place the fish into a bowl or on a plate and pour the soy sauce mixture onto the fish.
- Use plastic wrap to cover the top of the bowl and put the bowl into the steamer for 25 to 30 minutes.
- Take the fish out of the steamer and place on a plate. Drain the pre-prepared sliced ingredients and sprinkle on top of the fish. Serve with rice.

Legacy of the ACIAR's Fishery Program

Project FIS/2006/141 'Improving feed sustainability for marine aquaculture in Vietnam and Australia' can be considered as the starting point for one of the most important regional meetings to promote the adoption of more sustainable feeds for farmed aquatic species. The project organised the first 'Annual Regional Aquafeed Forum' in 2009, and the Forum has been held annually since then.

The 'Annual Regional Aquafeed Forum' promotes research collaboration and information exchange among aquaculture researchers and aquafeed manufacturers and distributors in the South-east Asian region. This event attracts from 100 to 150 participants each year, from all countries in the region.



Stir-fried Sea Cucumber with Shiitake Mushrooms

Ingredients

200 g	fresh sea cucumber (or frozen sea cucumber)
100 g	fresh shiitake mushroom
1 tbsp	lard (or vegetable oil)
20 g	sliced carrots
50 g	snow peas
50 g	celery
2	scallions
1	chilli pepper
4 cloves	garlic
½ tsp	sugar
1 tsp	salt
	pepper powder



Recipe by Dr Nguyen Dinh Quang Duy from ACIAR projects 'Increasing technical skills supporting community-based sea cucumber production in Vietnam and the Philippines' (FIS/2016/122), refined by Chef Nguyen Manh Hung.

Method

- Wash sea cucumber or defrost frozen sea cucumber.
- Slice sea cucumber into bite-sized pieces. Chop scallion into matchsticks. Smash garlic.
- Heat the frying pan. Add lard onto the pan and fry it until it is hot enough.
- Add garlic into the frying pan and stir evenly until fragrant. Add sea cucumber and mushroom. Continue to stir-fry for 3 minutes until they are cooked.
- Add carrots, celery, snow peas, and chilli pepper to the frying pan and stir-fry until they are tender-crisp.
- Season to taste then start plating. Serve when it is still hot.



Fast facts

Dr Nguyen Dinh Quang Duy works at Research Institute for Aquaculture No. 3 (RIA 3) in Nha Trang. Duy has a passion for sea cucumbers and has studied them since 2001 when he joined the ACIAR project 'Expansion and diversification of production and management systems for sea cucumbers in the Philippines, Vietnam and Northern Australia' (FIS/2010/042). Duy completed his PhD in 2017, working on larval nutrition of sea cucumbers and now heads sea cucumber research at RIA3 within the project FIS/2016/122.

ACIAR's research is aimed towards commercial-scale hatchery and grow-out technologies for sandfish, improving the livelihoods of coastal communities and preserving the balance of the marine ecosystem.

Braised Pork and Eggs in Caramel Sauce

Ingredients

200 g	pork belly
4	chicken eggs (or duck eggs)
30 g	sugar
50 ml	caramel sauce
300 ml	coconut water
1 tbsp	vegetable oil
3 cloves	red shallots, diced
1	scallion
30 ml	fish sauce
½ tsp	pepper
½ tsp	salt

Recipe by Mr Bui Van Quang from ACIAR project 'Reducing disease risks and improving food safety in smallholder pig value chains in Vietnam' (LPS/2010/047), refined by Chef Nguyen Manh Hung.

Method

- Slice the pork belly into bite-sized pieces. Marinate pork belly with red shallots, salt, pepper, 1 tablespoon of fish sauce. Leave it in the fridge for 15 minutes.
- Preheat a small saucepan. Add sugar and stir at a medium heat until it melts and turns into a caramelised color. Add 50 ml of water into the saucepan to make caramel sauce. Stir occasionally to help the sugar and water to combine evenly.
- Heat the vegetable oil in a braising pot over medium heat. When the oil is ready, add pork belly and stir-fry until it is light brown and fragrant. Add caramel sauce into the pot and stir over a maximum heat for 1 minute so that the sauce can spread evenly.
- Add the coconut juice. It should barely cover the pork. Partially cover the pot and let the pork braise for about 30 minutes at low to medium heat.
- Boil the eggs for 8 minutes. Peel the shells off and put the eggs into the braising pot, letting them simmer with the pork.
- Leave the pot at low heat for another 15 minutes. Season to taste before serving.



PHOTO: VU BAO KHANH



PHOTO: DUONG HANH NGUYEN

ACIAR's research is supporting safe vegetable production and linkages to profitable markets

ENHANCING FOOD SAFETY IN VIETNAM

Food safety is an increasingly important issue in Vietnam and is currently one of the highest priorities for the community and the Government of Vietnam. Foodborne Diseases (FBD) is not only a serious health problem but also a barrier for smallholder farmers to sell high-value agricultural products in both domestic and export markets.

Food safety has been identified as one of the key priorities in ACIAR's latest strategy for Vietnam. ACIAR is supporting the development of safe products in Vietnam through research projects and policy development for food safety. In addition, projects in all research programs support farmers in producing products that meet food safety standards of the domestic market and reach quality standards for export.

In the coming decade, ACIAR together with its partners in Vietnam will continue to tackle the barriers to agricultural development in Vietnam within six key areas of research: *Food safety; Climate change; Improving soil fertility and the efficiency of crop and crop-livestock systems; Improved market knowledge, access to markets, and skills for better policy analyses; Improving the value from forests; and Aquaculture.*

The 'Strategy for Agricultural Research Collaboration of Aciar in Vietnam 2017–2027' is available at: http://vietnam.embassy.gov.au/hnoi/ACIAR_Strategy.html



Grilled Beef Spring Rolls

Ingredients

600-800 g	beef (preference - tenderloin or fillet)
300 g	lettuce
1 cup	basil
1 cup	Thai basil or mint leaves (can substitute with other herbs)
50 g	bean sprouts
1	cucumber (around 150 g)
1	package rice paper

For marinade

3 bulbs	minced lemongrass
1 bulb	minced garlic
1 tbsp	vegetable oil
1 tsp	salt
2 tbsp	sugar
½ tsp	pepper powder

For dipping sauce

100 g	roasted and peeled peanuts
150 g	tomato
2	sliced chilli
4 cloves	sliced garlic
2 tbsp	water
2 tbsp	fish sauce
2 tbsp	sugar

Recipe by Ms Nguyen Thi Xe, Phuong Chi village, Cat Tien commune, Phu Cat district, Binh Dinh province. This is a typical dish of Central Vietnam.

Method

- Slice the beef.
- Marinate the beef with minced lemongrass, minced garlic, vegetable oil, salt, sugar and pepper powder for 20 minutes.
- Dipping sauce preparation:
 - + *Combine peanuts and tomato into a blender and blend for 2 minutes.*
 - + *Preheat oil in the frying pan, add 2 garlic cloves and stir-fry until they turn light brown.*
 - + *Add the mixture of peanut and tomatoes to the frying pan. Add sugar and keep the stove at low-med heat for 3 minutes. Set aside the mixture in a bowl.*
 - + *Add lemon juice, garlic, sugar, fish sauce and chilli into the mixture. Stir evenly to mix all of the flavours together.*
- Wash the vegetables and herbs. Trim to 5 to-7 centimetres length. Slice cucumber into 5 to 7 centimetres strips.
- Grill the marinated beef in the oven or on the grill (preference - charcoal grill).



Ms Nguyen Thi Xe is making grilled beef spring rolls at home

- Prepare a flat plate. Place rice paper on the plate and add vegetables and grilled beef on top. Fold right and left sides of wrapper over filling. Fold bottom edge up over filling and roll up tightly. Serve with dipping sauce.

About the project

Consumer demand for beef in Vietnam is rising rapidly and this provides an opportunity for smallholder farmers to increase beef cattle production and improve their families' income. However, increasing production requires a change in the way farmers grow and market cattle to ensure that these are produced efficiently and in an environmentally sustainable way.

ACIAR projects focus on research that supports farmers to transition to a more efficient and sustainable cattle production suited to local situations in the North West and the South Central Coast. Projects support the development of efficient and profitable crop-livestock systems, strengthen knowledge in livestock nutrition and link farmers to markets with the ultimate goal of helping farming families to improve their income.

Tapioca Noodle Soup with Crab and Shrimp

Ingredients

200 g	rice flour
300 g	tapioca starch
70 ml	boiling water
200 ml	coconut milk
2 (600 – 800 g)	large crabs
200 g	shrimps
100 g	pork meat
2-3	scallions
2 tsp	black pepper
	sugar, salt, monosodium glutamate, chilli

Recipe by Ms Doan Thi Truc Linh and Ms Huynh Mach Tra My from ACIAR project 'Improving the sustainability of rice-shrimp farming systems in the Mekong Delta, Vietnam' (SMCN/2010/083).

Noodle “Banh canh”

(You can buy banh canh noodle at Asian stores)

- Mix rice flour, tapioca starch and boiling water in a mixing bowl. Knead well until the dough is soft and not sticky. Cover and let the dough rest for about 30 minutes.
- Place the dough on the working surface which has been sprinkled with some flour. Use a rolling pin to roll the dough to a thickness of 0.4 centimetres. Cut into 7 centimetres strips.

Noodle Soup “Banh canh tom cua”

- Boil the crab.
- Heat some oil, then stir-fry onions to release their aroma, and add meat and stir well. When the meat is nearly cooked, add shrimps and continue to stir for about 3 minutes and then turn off the stove.
- Boil 1.5 litres of water in a large pot. Add the “banh canh” and continue to boil for 5 minutes, or until the banh canh is cooked. Add about 150 ml of coconut milk, pork meat and shrimps and continue to cook for 5 minutes.
- Add 1 teaspoon of sugar and 1/2 teaspoon of salt.
- Turn off the stove and add 50 ml of coconut milk and the crab meat at the end, along with the sliced scallions.
- Serve in a bowl using a ladle. Top up the bowl with stir-fried crab meat, shrimps and some pepper and chilli, along with the sliced scallions.

About the dish

Crab and shrimp tapioca noodle soup (Banh canh tom cua) is a traditional dish of the Mekong Delta region, especially in Ca Mau province. Farmers working under ACIAR Project SMCN/2010/083 commonly use shrimp and crab from their farms, and noodles made from their rice crops.

The tapioca noodle soup is soft and sweet, and the coconut milk adds a unique flavour. The sweetness of crab meat adds a seafood flavour and an enticing fragrance. People often make Banh canh tom cua for special occasions, such as the Tet festival, family reunions, weddings and other celebrations. This dish supplies essential nutrients for health, including calcium, magnesium, potassium, phosphorus, iodine from the shrimp and crab, and some vitamins from the rice flour. All in all, this dish is nutritious and delicious.



PHOTO: VU BAO KHANH

Grilled Shrimp with Chilli and Salt

Ingredients

500 g	fresh shrimp
1 tbsp	salt
1 tsp	pepper
1	cayenne pepper
1	chilli pepper
1	lime
2 tsp	cooking oil
50 g	Vietnamese mint

Recipe by Ms Ngo Thi Ngoc Thuy from ACIAR project
 'Improving the sustainability of rice-shrimp farming systems
 in the Mekong Delta, Vietnam' (SMCN/2010/083).

Method

- Grind chilli pepper, cayenne pepper, salt and pepper in a mortar. Add some cooking oil and mix well.
- Use a sharp knife to cut the black line down the back of the shrimp. Insert bamboo sticks from the tail to the head of each shrimp.
- Spread a layer of pepper mixture on the shrimps and set aside for about 10 minutes before being grilled.
- Grill shrimps in an oven or over a charcoal grill until the shrimps turn a red-yellow colour.
Note: Shrimps grilled on the charcoal grill or gas stove with direct fire will release a better aroma. Shrimps should not be grilled too much, otherwise they will become dry. Depending on the size of shrimps, grill each side from 1.5 to 2 minutes.
- Place cooked shrimps on a plate and serve with Vietnamese mint and lemon juice over the top or sauce made of salt, pepper and lemon juice mixed together.



Cooking tips

Grill in an oven: The oven should be turned onto 150°C for 10 minutes before grilling shrimps at 180°C. Depend on the size, grill shrimps for 8 to 10 minutes.

Grill over a charcoal grill/BBQ: Shrimps should be turned over every 1 to 2 minutes. Each time they are turned, add a thin layer of cooking oil to keep them moist.

Grilled shrimps with chilli and salt is a perfect match because the sweet taste of the shrimps infuses and combines with the spiciness of the chilli and the sour taste of lime. The dish is perfectly suitable for family parties, especially family BBQs.



*Ms Vo Thi Thao – One of the farmers who successfully applied the
ACIAR rice-shrimp model in Tan Bang commune, Thoi Binh district, Ca Mau province*

SEEKING SOLUTIONS TO CLIMATE CHANGE

Climate change has become one of the greatest challenges for humanity this century. In Vietnam, the impact of climate change is more obvious: The rise of the sea level has increased the area of saltwater intrusion; resulted in lost agricultural land; increased coastal erosion; and brought negative effects on transport infrastructure, urban and residential areas, socio-economic development, irrigation systems, agricultural production, people's lives and coastal ecosystems.

The Mekong Delta is the largest region for agricultural production in Vietnam producing many key products such as rice, fruit and

seafood. However, this is also a particularly vulnerable area due to the effects of climate change. It requires researchers to seek solutions in response to these changes, such as research on farming systems and the development of new varieties which are adaptable to climate change.

Over the past years, ACIAR has supported research on climate change in the North West, South Central Coast and the Mekong Delta. For the next 10 years, beside the Central Highlands and the North West, the Mekong Delta remains one of the geographic foci where ACIAR is committed to helping farmers respond to changes caused by the changing ecological environment and climate.

Sticky Rice with Corn

Ingredients

200 g	glutinous rice
2 (150 g)	white corn
100 g	roasted peanuts
1 tsp	salt



[Recipe by Chef Nguyen Manh Hung]

Method

- Soak the glutinous rice into cold water for 3 hours. Shuck the corn.
- Boil water in a steamer pot for 10 minutes.
- Mix glutinous rice and corn with 1 teaspoon of salt.
- Place the mixture in the steamer pot. Steam for about 25 to 30 minutes or until it is cooked.
- Crush roasted peanuts gently in a mortar then mix well with salt.
- Place hot sticky rice on a plate and serve with the mixture of salt and roasted peanuts.



PHOTO: VU BAO KHANH

Sticky Rice with Cassava

Ingredients

200 g	glutinous rice
200 g	cassava
20 g	fried onions
1 tsp	salt



[Recipe by Chef Nguyen Manh Hung]

Method

- Soak the glutinous rice into cold water for 3 hours.
- Peel cassava and cut it in half. Remove the core fibre then cut it into pieces. Soak cassava into the salt water for about 15 to 20 minutes.
- Boil water in a steamer pot for 10 minutes.
- Mix glutinous rice with the cassava and salt the mixture well. Place the mixture into the steamer pot. Steam for about 35 minutes or until it is cooked.
- Sprinkle over the top with fried onions and enjoy.



PHOTO: VU BAO KHANH



The agroforestry model is helping reduce soil erosion on sloping land and increase income for farmers in Yen Bai province.

FARMING SYSTEMS ON SLOPING LAND

In North West Vietnam, monoculture systems of hybrid maize, mainly for animal feed, are conducted on sloping land. This type of farming is a major cause of soil erosion and large-scale soil nutrition loss due to high rates of drainage, which decrease crop yields and productivity. Many areas have become unprofitable within less than 10 years. This problem leaves significant effects on sloping land where there remains to be a high poverty rate and a high concentration of ethnic minority communities.

Similar to the maize case study, the sustainability of the cassava industry, despite its important economic role, is facing up to a lot of endogenous and exogenous factors including soil erosion, soil fertility reduction, new pests and diseases, and high labour costs. On the

other hand, the market demand for cassava is high but always fluctuating so farmers often encounter many risks.

Changes in traditional farming practices, crop diversity, the combination between farming and animal husbandry and agroforestry are some of the solutions that ACIAR's projects are introducing to farmers to implement on sloping land. Soil and forest resources need to be preserved in the process of crop development and economic growth.

Linking farmers to profitable markets is also one of the projects' targets. In addition, capacity building for women and ethnic minority communities has always been a priority in all of ACIAR's research projects.

Coffee Yoghurt

Ingredients

1 cup

iced yoghurt

4 tps

coffee powder

100 ml

boiled water



[Recipe by Chef Nguyen Manh Hung]

Any yoghurt can be used to make this dessert. However, yoghurt made from fresh milk is recommended. This type of yoghurt is creamy and has a light sour taste which is very suitable to serve with black sticky rice or concentrated coffee.

Yoghurt is the best when being frozen overnight at a temperature ranging from -11°C to -15°C. At this temperature, the composition of the yoghurt is solid but not too hard so it is most enjoyable to eat.

Coffee making: Not everyone knows the way of making the perfect cup of Vietnamese coffee. I have learned how to brew coffee very simply from the old coffee seller on Yen Phu Street in Hanoi.

First, the coffee kit needs to be cleaned. Add the coffee powder, then gently place the coffee filter to separate the coffee and the water, and lightly press the coffee down flat.

Boil the water well and pour about 10 to 15 ml of hot water, then let the coffee rest for about 30 seconds to

1 minute to ensure the coffee powder is “breathing”. Continue to pour hot water slowly.

This is the time to measure how strong you would like the coffee. Add more or less water depending on your preference.

After brewing the coffee, let it cool before mixing with the yoghurt.

Note: Add water slowly several times. Should you add too much hot water at once, the water will drip down very quickly while the essence of the coffee powder remains, which will lead to a diluted coffee.

Take the yoghurt from the freezer, then use a spatula or grinder to get the desired yoghurt composition. Grind to soft or keep it hard depending on your preference.

Put the yoghurt into a cup and pour about 20 ml of coffee over the yoghurt.

Enjoy this delicious and healthy dessert.

Coffee can be intercropped with short-term crops and other perennial crops in the agroforestry systems.

The aim of the agroforestry system is to intercrop crops to increase income and reduce soil erosion on sloping land. The ACIAR project ‘Agroforestry for Livelihoods’ has developed eight agroforestry systems that provide farmers with options designed for specific soil, weather and local market conditions and minimise farmers’ risks. Systems including coffee trees such as acacia-longan-coffee-beans-grass; grass-teak-plum-coffee-beans; and coffee-beans-macadamia are now producing good results

and generating profits for farmers. Growing under a perennial canopy can help coffee reduce the strong light in the summer and the frost in the cold winter, and grow well with higher quality fruits.

The future looks very bright for the expansion of agroforestry in North West Vietnam and ACIAR is now funding a second phase of this project.

ACIAR Project: FST/2010/034, ‘Agroforestry for livelihoods of smallholder farmers in northwestern Vietnam’; FST/2016/152, ‘Developing and promoting market-based agroforestry and forest rehabilitation options for northwest Vietnam’.

Plum Jam

Ingredients

- 1 kg ripe Moc Chau plums (could use an alternative type of plum)
- 700 g sugar
- 20 g ginger juice
- 1 cotton cooking bag

Recipe by Chef Nguyen Manh Hung



Method

- Wash plums and cut them into 4 pieces. Remove the pits and set aside.
- Mix the plum meat with sugar.
- Crush plum pits in a mortar then wrap the pits mixture in the cotton cooking bag and tie it carefully to avoid it breaking at the time of cooking.
- Place the bag of crushed pits into the mixture of plum meat and sugar, then soak the mixture for at least 7 to 8 hours. Wrap it with food film to keep it at room temperature.
Note: Plum pits are very important to the mixture because the pectin in the plum pits will make the jam more condensed (may use pectin powder as an alternative.). The mixture should be made in the evening and soaked overnight so it can be ready for the next morning.
- After soaking for 7 to 8 hours, place the mixture into a pot on the stove at a medium-high temperature.
Note: Blend the mixture well before boiling. During the time of cooking, stir occasionally to avoid burning the plum meat on the bottom of the pot. For ripe plums, just cook for 45 minutes until it is smooth and soft. For unripe plums, cook for about 50 to 55 minutes until bubbles are visible and the mixture becomes condensed.
- Add ginger juice to the mixture, stir and cook for 5 minutes before turning off the heat. Remove the bag of crushed pits.
- Let the plum jam cool down, then bottle up and store it in the refrigerator for at least 1 week before serving. Plum jam can be stored for several months in the refrigerator.



PHOTO: PHAM BICH THUY

Pancakes with Plum Jam

Ingredients

250 g	plain flour
1.5 tsp	baking powder
1	egg
200 ml	unsweetened milk
50 g	melted butter
1 tbsp	sugar
¼ tsp	salt
50 ml	honey or maple syrup
20 g	plum jam

[Recipe by Chef Nguyen Manh Hung]

Method

- Beat the egg in a bowl then add milk into the bowl. Whisk them well together until blended.
- In another bowl, mix plain flour, baking powder and salt. Then pour the mixture of milk and egg into the powder mixture slowly. Whisk them well until the flour and milk becomes smooth with no lumps. Wrap the bowl with food film and set aside for 20 minutes before frying.
- Preheat the pan over a medium-high temperature. Spread a little bit of melted butter across the pan.
- Use a ladle to spread the mixture into the pan. Fry until golden over low heat to make sure that the pancake is cooked evenly. After about 2 to 3 minutes, toss the pancake until cooked completely.
- Fry and place each pancake in a tier, one above another on a plate.
- Spread the plum jam over the pancake and pour honey over the top of the pancake tier evenly.



Fast facts

Moc Chau and Bac Ha plums are specialty fruit of the highlands with light sweet and sour taste. The North West has favourable climate for temperate fruits such as plum, peach and pear. These fruits are preferred in the cities like Hanoi and across the border with China. Fruit trees also play an important role in soil erosion control on sloping land.

Plum trees have been grown in the highlands for several decades and are an important source of income for smallholder farmers. Typical plum farmers in Moc Chau have about a hectare of orchard with 250-300 trees. They also intercrop plum with maize and other crops. In 2016, there was a total area of 1,450 hectares of plums in Moc Chau, with production of 16,700 tonnes.

Plum trees have been supported by ACIAR Vietnam research programs since 2001. Projects on plums and temperate fruits in the North West have researched from variety, orchard management, pest control, to market research and plantation planning with the coordination of the provincial agencies.



The *Farmers' Gourmet* is published on the 25th anniversary of the Australian Centre for International Agricultural Research (ACIAR)'s cooperation with Vietnam (1993-2018).

ACIAR is part of the Australian Government's International Development Assistance Program, and contributes to that Program's objectives of helping the partner countries reduce poverty and achieve sustainable development.

ACIAR funds and manages collaborative agricultural research carried out by Australian and international research institutions. These partnerships seek to solve agricultural problems in the partner countries and Australia.

Since 1993, ACIAR has invested around A\$100 million in 170 projects in Vietnam.





Chef Nguyen Manh Hung and farmer Ms Phan Thi Thu in her plum garden at Na Ka village, Moc Chau district, Son La province. Ms. Thu's garden is one of the few plum orchards in Moc Chau to meet strict requirements of modern retailers in Hanoi. Ms. Thu and other plum farmers are supported by the ACIAR project AGB/2012/060 'Improving smallholder incomes in the North-Western highlands of Vietnam by increasing access and competitiveness in regional temperate and subtropical fruit markets' to link with more stable markets with higher profits.



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25 years in Vietnam