



Putting the International Year of Pulses into EE and EfS

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“Nutritious seeds for a sustainable future”

“Healthy soils for a healthy life”

“Feeding the world, caring for the earth.”

Have you heard of these slogans from International Years?

“Nutritious seeds for a sustainable future” is the slogan for the 2016 International Year of Pulses, as declared by the 68th UN General Assembly.

If you aren’t familiar with pulses, that’s okay. The first aim of any International Year is to raise awareness about its target and its importance to the world. So how might ‘pulses’ fit into EE or EfS? Consider the slogan!

What are Pulses

Pulses are a food group of dried edible seeds from the legume family. They include faba beans, lupins, lentils, chick peas and field peas (*see photo, L-clockwise*) and are a critical part of the general food basket.



‘Legumes’ are food plants whose seeds are enclosed in pods. Most legumes fix nitrogen into the soil as they grow, hence ‘sustainable future’ in the slogan.

Others further distinguish between

these seeds by the saying: “we sow legumes, and eat pulses”.

When cooked, they provide a non-fatty protein-rich food, hence ‘nutritious seeds’ in the slogan.

Basic resources

There are three global resources to help you decide if the International Year of Pulses will fit in with your EE or EfS program.

1. The aims of the International Year of Pulses 2016 are to:

- Raise awareness about the important role of pulses in sustainable food production and healthy diets and their contribution to food security and nutrition;
- Promote the value and utilization of pulses throughout the food system, their benefits for soil fertility and climate change and for combating malnutrition;
- Encourage connections throughout the food chain to further global production of pulses, foster enhanced research, better utilize crop rotations and address the challenges in the trade of pulses.

2. The International Year of Pulses 2016 summarises its importance in five key messages:

- Pulses are highly nutritious
- Pulses are economically accessible and contribute to food security at all levels.
- Pulses have important health benefits.
- Pulses foster sustainable agriculture and contribute to climate change mitigation and adaptation.
- Pulses promote biodiversity.

Where would you see your EE or EfS program fit? For me, the first is relevant to all soil users and food producers from backyards to schools to commercial farmers. The second and third key points are environmental and food issues. The final two, are about food and cooking, and fit within an interdisciplinary program.

3. The Global Pulse Federation provides a generic teaching program for middle-upper primary levels online.

This free downloadable program has six independent lessons covering pulses, health and nutrition, cooking, growing, around the world and for food security. You can access the [IYP Lesson Plans here](#).

The Wimmera

I live in the Wimmera, in the traditional “wheat-sheep belt”, a major Australian grain production region, and major global food producer. Times have changed with the drying climate. Farmers’ concerns for their soils’ sustainability over the last 30 years has led to legumes being planted by most farmers today. The Wimmera is now an important global source of pulses. For example, faba beans go to the Middle East and lentils to the Subcontinent.

Pulses are very relevant to EE and EfS here, as were (and still are) the [2014 International Year of Family Farming](#) and [2015 International Year of Soils](#) — both of which are continuing as UN Decades.

I am currently creating and sourcing funding for a 4-session interdisciplinary “Pulse” education program for primary schools to run later this year. To me, including an International Year in EE/EfS is important in connecting local learning to a current global focus, aka “acting locally, thinking globally”.

What do you think – could pulses be a part of your EE/EfS program this year?

Find out more

[2016 International Year of Pulses](#)

[IYP Promotional Resources](#)

[EnviroEd4All programs](#)

‘From Soils to Pulses’ in *Otherways* magazine

Explore these pulses and seeds:

<http://enviroed4all.com.au/wimmera-biodiversity/crops/>

<http://www.shreyasbharadwaj.com/my-life/indian-names-for-food-products>

Pulses: good for us, good for the soil and good for Australia

By Lynne Strong

Picture You in Agriculture

2016 is the United Nations International Year of the Pulses (IYP). Not familiar with pulses? Pulses are plant species members of the Leguminosae family (commonly known as the pea family) that produce edible seeds, which are used for human and animal consumption.

Good for Australia

The Australian grains industry is recognised as producing the world's premium quality grain. Australian grain is the cleanest, the brightest, the driest and is sourced from one of the most environmentally sustainable areas of the planet.

The pulse industry is one of Australian agriculture's success stories. From humble beginnings, Australia is now a major player in the global pulse markets and one of the world's largest exporters of pulses.

Not only does Australia have the climatic diversity to enable it to supply a broad range of pulse products, but Australian growers, marketers, researchers and industry leaders are demonstrating they have the drive, ingenuity and skills to meet any challenge facing the industry.

Pulses grown by our Australian farmers include lentils, chickpeas, peas, faba beans, mungbeans and adzuki beans. 90% of Australian pulses are exported overseas with the Indian Subcontinent, North Africa, the Middle East and Asia the largest importers/buyers of Australia's various pulses.

Pulses are grown in all states of Australia (excluding the territories).

Good for the soil

The pulse industry's growth is increasingly becoming a key to the future sustainability of the whole Australian grains industry as the strategic importance of pulses within the cereal cropping system in Australia continues to grow. Research has shown that farm systems gain substantial benefit from the increased yield and protein content in cereal and oilseed crops that are planted



Dan Fox and Students from Stockinbingal Public School

following pulse crops.

Pulses naturally fix nitrogen in the soils, which means less fertilizers are required, which leads to less input costs to the grower. This naturally fixed nitrogen has been scientifically proven to increase the productivity of the subsequent crop and is available in the soil for up to three years.

Growing pulses in a cropping rotation also provides a break to soil borne pathogens and plant diseases that can reduce grain yields significantly.

Daniel Fox, a Young Farming Champion and a fifth generation farmer from Marrer in New South Wales, well understands the use of pulses on his farm Gladlea and is keen to share the good word, visiting schools as part of the annual **Archibull Prize**.

As the students of Stockinbingal Public School will tell you: "Gladlea is a property of 5000 acres with 80% used for cropping and 20% for sheep. Daniel grows wheat, barley, canola and lupins. Dan rotates his crops by planting three cereal crops then a pulse crop to replace the nitrogen in the soil." Even young Australians get the importance of the pulse.

Good for us

Nutrition Australia redesigned the 'food pyramid' in 2014 and the only food item to appear in that diagram twice are pulses. Pulses are a high source of protein and a high source of fibre. Medical research has proven that eating pulses 2-3 times per week lowers your blood sugars and cholesterol level.

A Grains & Legume Nutrition Council (GLNC) 2014 consumption study identified that only 35% of Australians reported eating legumes at least 2-3 times per week, therefore many Australians may be missing out on the essential nutrients and other health benefits of legumes.

So how many pulses do you and I have to eat to achieve the Nutrition Australia dietary guidelines on pulses? The answer is 1.5 cups of cooked pulses per week or 75grams of cooked pulse per week.

Our truly multicultural society has introduced our palates to a diversity of tasty cuisines that use pulses. Australian have progressed from only eating pulses in dips or soups, to consuming them in economical salads like lentil and mango, or bean, olive and chicken bakes. You can slip a pulse into your spaghetti bolognaise, most of your salads or even bake them with your roast vegetables.

Pulses can also act as a protein replacement for some people with food allergies. Did you know, for example, people who are allergic to eggs can use the brine from a can of chickpeas to make meringues?

2016 is a once in a life time opportunity to celebrate a grain we grow successfully here in Australia. Get on board and eat more pulses in 2016!

About Young Farming Champions

For more information about the Young Farming Champions program, visit www.art4agriculture.com.au/yfc.