WA researchers are emulating their world leading grain growing counterparts with the development of the first ever Australian bred and released grass pea variety.

Centre for Legumes in Mediterranean Agriculture (CLIMA) researchers are keeping growers one step ahead, with the development of Lathyrus sativus.

According to CLIMA Director, Kadambot Siddique, the new cultivar Ceora (pronounced see-or-a), tested as Lathyrus 20B, can fulfil a multi-purpose role as a low cost, low input grain legume, forage, hay or green manure crop.

It was bred by Dr Colin Hanbury, Professor Siddique and Dr Ashutosh Sarker of CLIMA.

“Ceora is well adapted to low to medium rainfall environments and neutral to alkaline, fine textured soils,” Professor Siddique said.

“It is waterlogging and drought tolerant and its growth habit and yield is similar to field pea.

“Grass pea offers growers another tool in their rotation and an opportunity to diversify their farming system.”

Keeping the benefits of the new variety tightly in growers’ hands, CLIMA is releasing it using a ‘public good’ approach by not imposing any royalty and allowing grower to grower trading after October 2008.

This will enable growers to readily obtain seed and trial Ceora on their properties.

According to Professor Siddique, the immediate end uses for Ceora are likely to be in supplementary stock feed, as there is no trade in grass pea grain.

“On a grass pea diet, sheep liveweight gain per kilogram was greater than on lupins, while non-ruminants, such as poultry, could also be safely fed the new variety.

“While Lathyrus sativus contains a neurotoxin, ODAP, that causes paralysis of the lower limbs known as ‘lathyrism’, ODAP levels (0.04 to 0.09 per cent) in Ceora are well below safe thresholds and the risk of animals developing ‘lathyrism’ is extremely unlikely,” Professor Siddique said.
The superior disease tolerance of grass pea, compared to field pea or vetch, means that grass pea may be sown from mid-April.

Also, Ceora’s drought tolerance permits more flexible sowings where a delay is required for weed control or to fit in with sowing of other crops.

Like other legumes when used in rotation, Ceora will act as a break crop for root and stubble-borne diseases of cereals.

“It also allows grass weed control and nitrogen fixation,” Professor Siddique said.

“Ceora should be followed with a cereal crop to provide the best opportunity to remove volunteer plants and maximise its value as a leguminous break crop.

“The best rotations, to maximise gross margins, do not include Ceora more than one year in four.

“It is not advisable to follow grass pea with a broadleaf crop such as lupin, chickpea, field pea, faba bean, lentil, vetch or canola.

“A pasture phase may follow a Ceora crop, but this is not recommended, as growers will lose the rotation benefits it offers to a following cereal crop.

“Although much is still to be learned about Ceora’s agronomy, its management will generally be similar to that of vetch or chickling vetch in WA,” Professor Siddique said.

Grass pea, also known as chickling pea, Indian pea and khesari, has a long history of cultivation for human food and forage in central southern Europe, North Africa, Ethiopia, West Asia, the Indian sub continent and China.