Registration of ‘Ceora’ Grass Pea

‘Ceora’ grass pea (*Lathyrus sativus* L.) (Reg. no. CV-259, PI 640423) was bred and selected by the Centre for Legumes in Mediterranean Agriculture (CLIMA), Australia. Ceora is Australia’s first grass pea cultivar. It is a hardy annual cool season legume with a growth habit similar to the field pea (*Pisum sativum* L.). Ceora is intended to fulfil a multipurpose role as a low-cost, low-input grain legume, green forage species, hay or green manure crop. It is best adapted to medium to heavy textured soils of southern Australia where the annual rainfall ranges between 300 and 650 mm. It has a very low level of neurotoxin 3-(-N-oxalyl)-L-2,3-diamino propionic acid (ODAP) content in the seed (0.04–0.09%).

Ceora was derived from a cross made in 1994 at Northam, Western Australia (WA), using female parent K33 (originating from Pakistan) × male parent 8604 (originating from Bangladesh). The F₁ was grown during the summer of 1994–1995 at South Perth. An F₂ bulk was grown in isolation during 1995 and individual plant selections were made based on vigour and F₃ seed collected at Muresk, WA, in 1996. In 1997, separate rows derived from F₃ individuals were sown and selections were made for good vigour and earlier flowering. F₄ seed from selected rows was analyzed for low levels of ODAP. In 1998, F₄-derived lines were sown at Shenton Park, WA, and F₅ seed tested for low ODAP levels. In 1999, F₆ seed was sown in a screen house at Northam, WA, and F₇ seed collected from uniform plants. In 2000, F₇ seed was sown in a screen house at Medina, WA, and F₈ seed collected from uniform plants. Selection criteria used were plant vigour, early maturity, flower color, seed coat color, and seed ODAP. In 2001, F₈ selections were sown in isolation at Carnarvon, WA, and F₉ seed bulked. In 2002 F₉ seed was sown at Manjimup, WA, in isolation and F₁₀ seed harvested.

Ceora has a semi-erect growth habit and no anthocyanin coloration on the plant. Stem is fasciated, with short to medium length (x = 519 mm) and tendrils. Time to flowering is early to medium and Ceora has white flowers with central dark blue flecking. The seed shape of Ceora is angular and the color of testa is gray orange with cotyledon color yellow.

Ceora was tested in several small plot yield evaluation trials conducted between 1998 and 2003 in WA and has produced on average 0.5 to 1.8 Mg ha⁻¹ seed yield. Dry matter production at flowering is similar to or greater than field pea (cv. Dundale) especially with early sowings. The tissue N content is about 45%, indicating good potential for green manuring. Ceora has low ODAP content in the seed and protein content of about 30%. No serious fungal disease has been recorded on Ceora in WA.

Seed of Ceora is maintained and can be obtained for research purposes through the Germplasm Enhancement Program, Centre for Legumes in Mediterranean Agriculture, The University of Western Australia, Australia. In the United States, small quantities of seed may be obtained from the National Plant Germplasm System (NPGS).

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