The Concept Pear Orchard, developed by Sainsbury’s and Chingford Fruit, has shown a strong variation between its four growing methods for the first time.

The ‘v-system’ produced the equivalent of 54.4 tonnes per hectare, a rise of 129 per cent on the 2012 performance, compared to 38.4 tonnes produced by the ‘conventional English’ system. The orchard’s two other systems, the ‘double head’ and ‘run-through’ methods, produced the equivalent of 51.2 tonnes and 46.4 tonnes per hectare respectively.

The orchard, based at East Malling in Kent, is producing more than 54 tonnes per hectare - more than three times the national Conference pear production average of only 14 tonnes per hectare.

Graham Caspell, commercial farm manager at the estate at East Malling, said: “The season started poorly, the blossom although strong was late, but we’ve been very pleasantly surprised by the orchard’s results.

“Importantly for UK pear growers it clearly shows that one of the four systems used in the orchard, offers a commercial advantage over the others. The results reinforce the already strong case for investing in intensive pear production and adopting these growing techniques.”

Francis Wheatley, technical manager at Chingford Fruit, said: “Not only is the orchard significantly ahead of the industry standard in terms of the volume of the crop, it is successfully producing a commercial crop several years before a traditionally planted conference pear orchard in the UK.”

The orchard uses Dutch growing techniques and has been developed in partnership with East Malling Limited and AG Thames.