

STORAGE SCENARIO 1

You are storing Maris Piper for the fresh market. The crop is coming in wet off silt soils and with a significant level (over 10% surface area on most tubers) of black dot.

Being loaded into a 1,500 tonne box store with overhead throw fridge system (no ambient) built in 2017, which has had no CIPC applied to it. There is a suction wall plenum chamber across the back of the store with fridge system inside. The fridge system delivers about 0.02m³/s/t or 40cfm/t of air.

A recent air leakage test has shown up that the building wasn't sealed properly at the eaves when it was built resulting in some air loss; the AP50 test scored 9 m³/s.m² against a best practice target of 3.

STORAGE SCENARIO 2

A crop of Taurus for crisping is due for delivery on contract at the end of May. It has been grown on an irrigated sandy loam. Maleic hydrazide was applied three weeks before desiccation for volunteer control and sprout suppression during storage.

Fry colours at intake have been good and the crop is sound with no evidence of rots. The control system flushes the store regularly: every six hours for 30 minutes.

The store is a 2,000 tonne bulk unit with a central tunnel and underfloor laterals. It has a history of at least 10 years' application of CIPC. There is no refrigeration.

STORAGE SCENARIO 3

This store has a stock of Lady Claire loaded which is destined for the crisping market in March. About 0.25 % of the crop is coming in with signs of soft rot.

The store is about 12 years old. The capacity is around 1,500 tonnes. It is a lateral suction box store with canvas covers and there is a roof-mounted refrigeration unit running on R22 gas.

The store is using some second-hand solid-sided boxes bought from a neighbour last year. CIPC has been applied yearly for at least the past five years. Two of the four fans available to ventilate the crop have broken down but it is still delivering about 0.02m³/s/t or 40cfm/t of air.

STORAGE SCENARIO 4

You've grown a high-yielding crop of Markies (for the chip shop market), although it is coming in with disappointingly poor skin set. Maleic hydrazide was applied when the crop was very green for volunteer control and sprout suppression during storage.

You're loading into a 3,000 tonne bulk store with airflow of around 0.015m³/s/t or 30cfm/t. There are no inverters. CIPC was last applied three years ago as you've unloaded the store prematurely in the last two years. It is therefore important to get the crop to its contracted date this year.

There are problems with condensation forming on the roof every season, especially in cold weather. Sprouting tends to be worse on the top surface of the pile and bacterial rots were also an issue in 2018