



Weekly Australian Climate, Water and Agricultural Update

No. 16/2021

29 April 2021

Summary of key issues

- During the week ending 28 April 2021, blocking high pressure systems resulted in little rainfall being recorded across much of Australia. In contrast, low pressure troughs and cold fronts generated rainfall across parts of north-eastern and far southern Australia ([see Section 1.1](#)).
- The rainfall across cropping regions in northern Queensland has likely been beneficial for early sown winter crops. The dry conditions in northern cropping regions of New South Wales and central and southern Queensland have been ideal for late summer crop harvesting, as well as field preparation and sowing of winter crops.
- Rainfall during April has consolidated the early autumn break recorded across isolated parts of north-eastern New South Wales, southern Victoria, Western Australia and northern and eastern Tasmania. These falls have continued to improve soil moisture profiles and provided an ideal start to winter crop planting and autumn pasture growth in these areas ([see Section 1.2](#)).
- However, the early autumn break was not consolidated during April for large areas of New South Wales, Victoria, Western Australia and Tasmania. This dry period following the early autumn break increases the risk of plants experiencing moisture stress after germination.
- Over the next eight days, troughs, cold fronts and onshore winds are likely to bring showers and storms to parts of southern and eastern Australia, while high pressure systems are expected to keep the remainder of Australia dry.
- In Australia's cropping regions, rainfall totals of between 10 and 50 millimetres are expected across much of New South Wales, Victoria and Western Australia. Little to no rainfall is expected across cropping regions in South Australia and Queensland. The rainfall across cropping regions in New South Wales and Victoria will boost soil moisture levels and benefit early sown winter crops following a dry April 2021 ([see Section 1.3](#)).
- Water storage in the Murray–Darling Basin (MDB) decreased by 119 gigalitres (GL) between 21 April 2021 and 28 April 2021. The current volume of water held in storage is 13,949 GL, which represents 55% of total capacity. This is 62% or 5,336 GL more than at the same time last year.
- Allocation prices in the Victorian Murray below the Barmah Choke increased from \$80 per ML on 22 April 2021 to \$95 per ML on 29 April 2021. Prices are lower in the Murrumbidgee due to binding of the Murrumbidgee export limit.

1. Climate

1.1. Rainfall this week

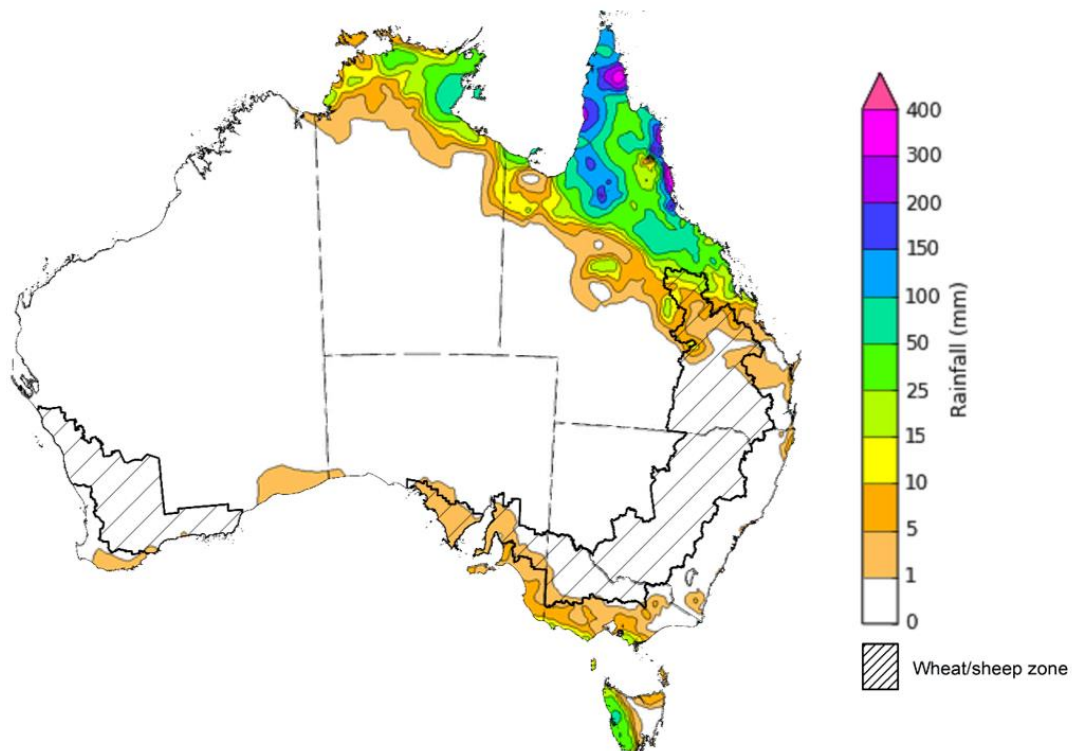
During the week ending 28 April 2021, blocking high pressure systems resulted in little rainfall being recorded across much of Australia. In contrast, low pressure troughs and cold fronts generated rainfall across parts of north-eastern and far southern Australia.

Rainfall totals of between 5 and 25 millimetres were recorded across parts of central Queensland, southern Victoria, south-eastern South Australia and the north of the Northern Territory. Rainfall totals of between 25 and 100 millimetres were recorded across parts of north-eastern Queensland, the north of the Northern Territory and western Tasmania. Rainfall in excess of 100 millimetres was recorded across isolated parts of northern Queensland.

In cropping regions, rainfall of between 5 and 25 millimetres was recorded across parts of northern Queensland. Little to no rainfall was recorded across cropping regions in New South Wales, Victoria, South Australia, Western Australia and remaining cropping regions in Queensland.

The rainfall across cropping regions in northern Queensland has likely been beneficial for early sown winter crops. The dry conditions in northern cropping regions of New South Wales and central and southern Queensland have been ideal for late summer crop harvesting, as well as field preparation and sowing of winter crops. As most cropping regions in Victoria and South Australia received low rainfall totals during March and April and have low soil moisture levels, these regions will rely on May rainfall to support winter crop germination and establishment.

Rainfall for the week ending 28 April 2021



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Note: The rainfall analyses and associated maps utilise data contained in the Bureau of Meteorology climate database, the Australian Data Archive for Meteorology (ADAM). The analyses are initially produced automatically from real-time data with limited [quality control](#). They are intended to provide a general overview of rainfall across Australia as quickly as possible after the observations are received. For further information go to <http://www.bom.gov.au/climate/rainfall/>.

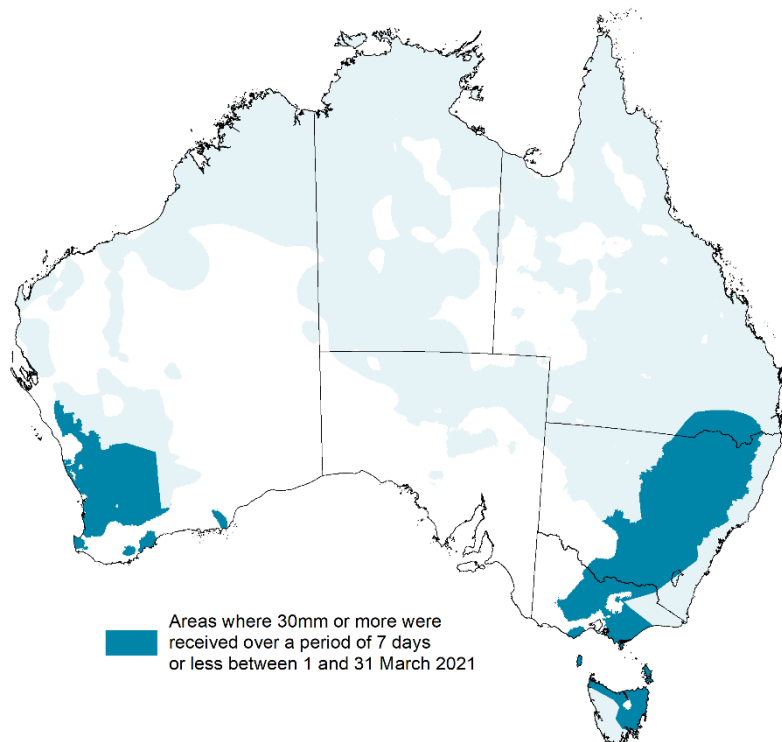
Issued: 28/04/2021

1.2. Autumn break

The definition of the autumn break in southern Australia varies. Pook et al. (2009) suggested an ideal break for north-western Victoria occurs during March–June when a mean fall of 25 millimetres or more is recorded over a period of 3 days or less, or when a mean fall of 30 millimetres or more is recorded over a period of 7 days or less.

ABARES has adapted the Pook et al. (2009) autumn break definition of falls of 30 millimetres or more recorded within any 7-day period from 1 March to identify where the autumn break threshold has been achieved across southern Australia. ABARES analysis of daily rainfall data sourced from the Bureau of Meteorology indicates that the early autumn break (during March 2021) had been achieved across much of New South Wales, Western Australia and parts of southern Queensland, central Victoria and northern and eastern Tasmania.

Areas that have achieved 30 millimetres in any 7-day period from 1 to 31 March 2021



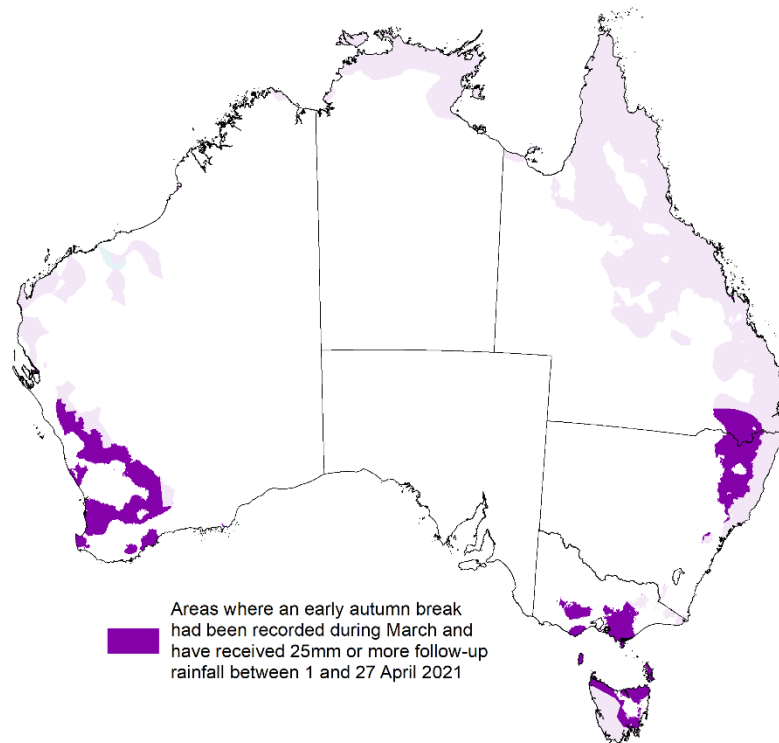
Source: Bureau of Meteorology, ABARES

Note: The autumn break generally applies to the southern pasture and cropping areas mainly in New South Wales, Victoria, South Australia, Western Australia and Tasmania — and occasionally parts of southern Queensland. Areas that are not typically influenced by the autumn break have been shaded out.

Rainfall during April has consolidated the early autumn break recorded across isolated parts of north-eastern New South Wales, southern Victoria, Western Australia and northern and eastern Tasmania. These falls have continued to improve soil moisture profiles and allowed for an ideal start to winter crop planting and autumn pasture growth in these areas. A consolidated early autumn break can increase the length of the growing season, potentially improving production and yield.

The early autumn break was not consolidated during April for large areas of New South Wales, Victoria, Western Australia and Tasmania. This dry period following the early autumn break increases the risk of plants experiencing moisture stress after germination, with a disconnect emerging between upper- and lower-layer soil moisture.

Areas that have received at least 25 millimetres of follow-up rainfall from 1 April to 27 April 2021



Source: Bureau of Meteorology, ABARES

Note: The autumn break generally applies to the southern pasture and cropping areas mainly in New South Wales, Victoria, South Australia, Western Australia and Tasmania — and occasionally parts of southern Queensland. Areas that are not typically influenced by the autumn break have been shaded out.

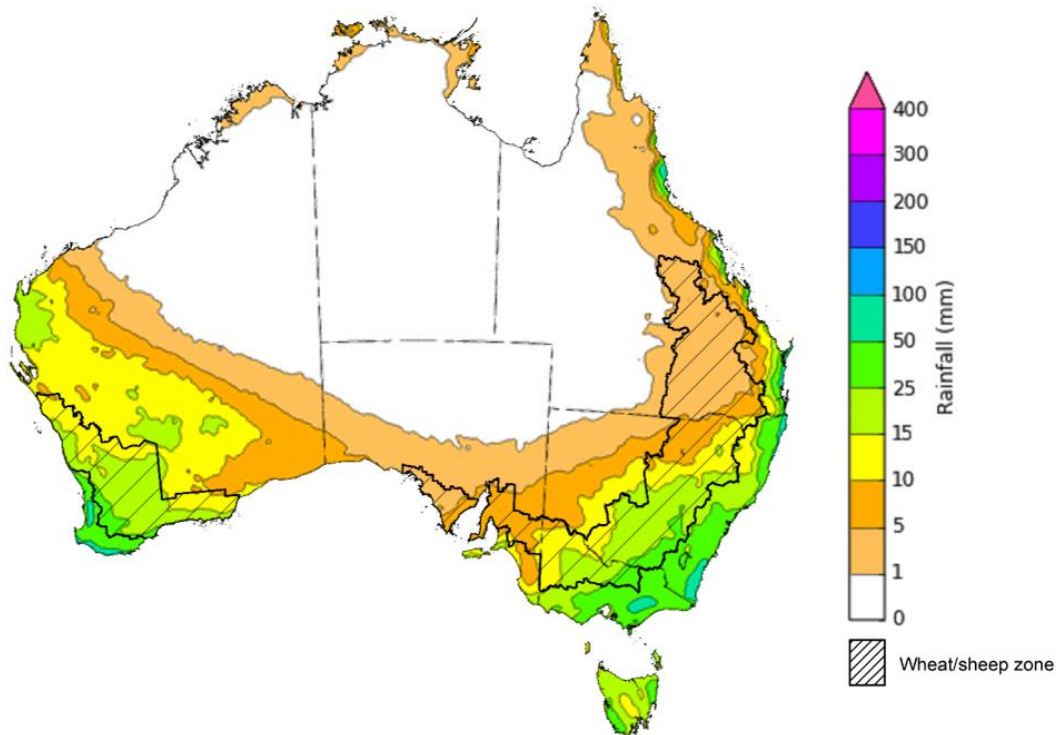
1.3. Rainfall forecast for the next eight days

Troughs, cold fronts and onshore winds are likely to bring showers and storms to parts of southern and eastern Australia during the 8 days to 29 April 2021, while high pressure systems are expected to keep the remainder of Australia dry.

Rainfall totals of between 10 and 50 millimetres are forecast for much of New South Wales, Victoria, south-western Western Australia, Tasmania and parts of eastern Queensland and south-eastern South Australia. Rainfall totals in excess of 50 millimetres are forecast for isolated parts of far south-eastern and south-western Australia, and the eastern coast of Queensland.

In Australia's cropping regions, rainfall totals of between 10 and 50 millimetres are expected across much of New South Wales, Victoria and Western Australia. Rainfall totals of between 5 and 10 millimetres are expected across the remainder of New South Wales cropping regions and cropping regions in parts of southern Queensland and central and eastern South Australia. Little to no rainfall is expected across remaining cropping regions in South Australia and Queensland. The rainfall across cropping regions in New South Wales and Victoria will boost soil moisture levels and benefit early sown winter crops following a dry April 2021.

Total forecast rainfall (mm) for the period 29 April to 6 May 2021



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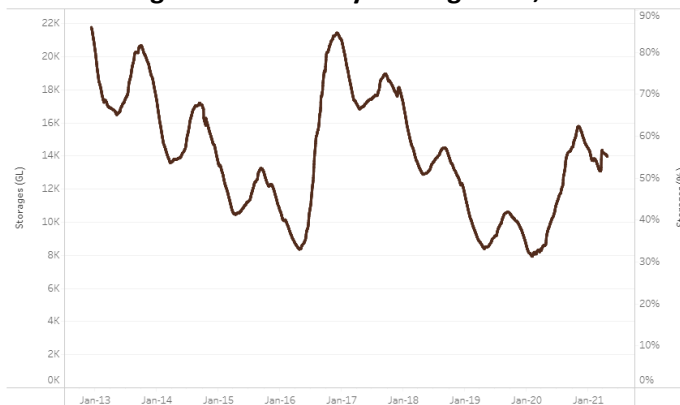
Note: This rainfall forecast is produced from computer models. As the model outputs are not altered by weather forecasters, it is important to check local forecasts and warnings issued by the Bureau of Meteorology.

2. Water

2.1. Water markets – current week

Water storage in the Murray–Darling Basin (MDB) decreased by 119 gigalitres (GL) between 21 April 2021 and 28 April 2021. The current volume of water held in storage is 13,949 GL, which represents 55% of total capacity. This is 62% or 5,336 GL more than at the same time last year.

Water storages in the Murray-Darling Basin, 2013–2021

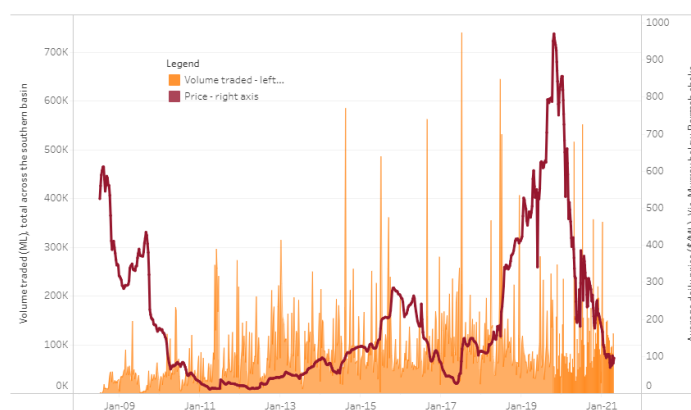


Water storage data is sourced from the Bureau of Meteorology.

Allocation prices in the Victorian Murray below the Barmah Choke increased from \$80 per ML on 22 April 2021 to \$95 per ML on 29 April 2021. Prices are lower in the Murrumbidgee due to binding of the Murrumbidgee export limit.

Region	\$/ML
NSW Murray Above	95
NSW Murrumbidgee	70
VIC Goulburn-Broken	100
VIC Murray Below	95

Surface water trade activity, Southern Murray–Darling Basin



The trades shown reflect estimated market activity and do not encompass all register trades. The price is shown for the VIC Murray below the Barmah choke. Historical prices (before 1 July 2019) are ABARES estimates after removing outliers from BOM water register data. Prices after 1 July 2019 and prior to the 30 October 2019 reflect recorded transaction prices as sourced from Ruralco. Prices after the 30 October 2019 are sourced from Waterflow. Data for volume traded is sourced from the BOM water register. Data shown is current at 29 April 2021.

To access the full, interactive, weekly water dashboard, which contains the latest and historical water storage, water market and water allocation information, please visit

http://www.agriculture.gov.au/abares/products/weekly_update/weekly-update-290421

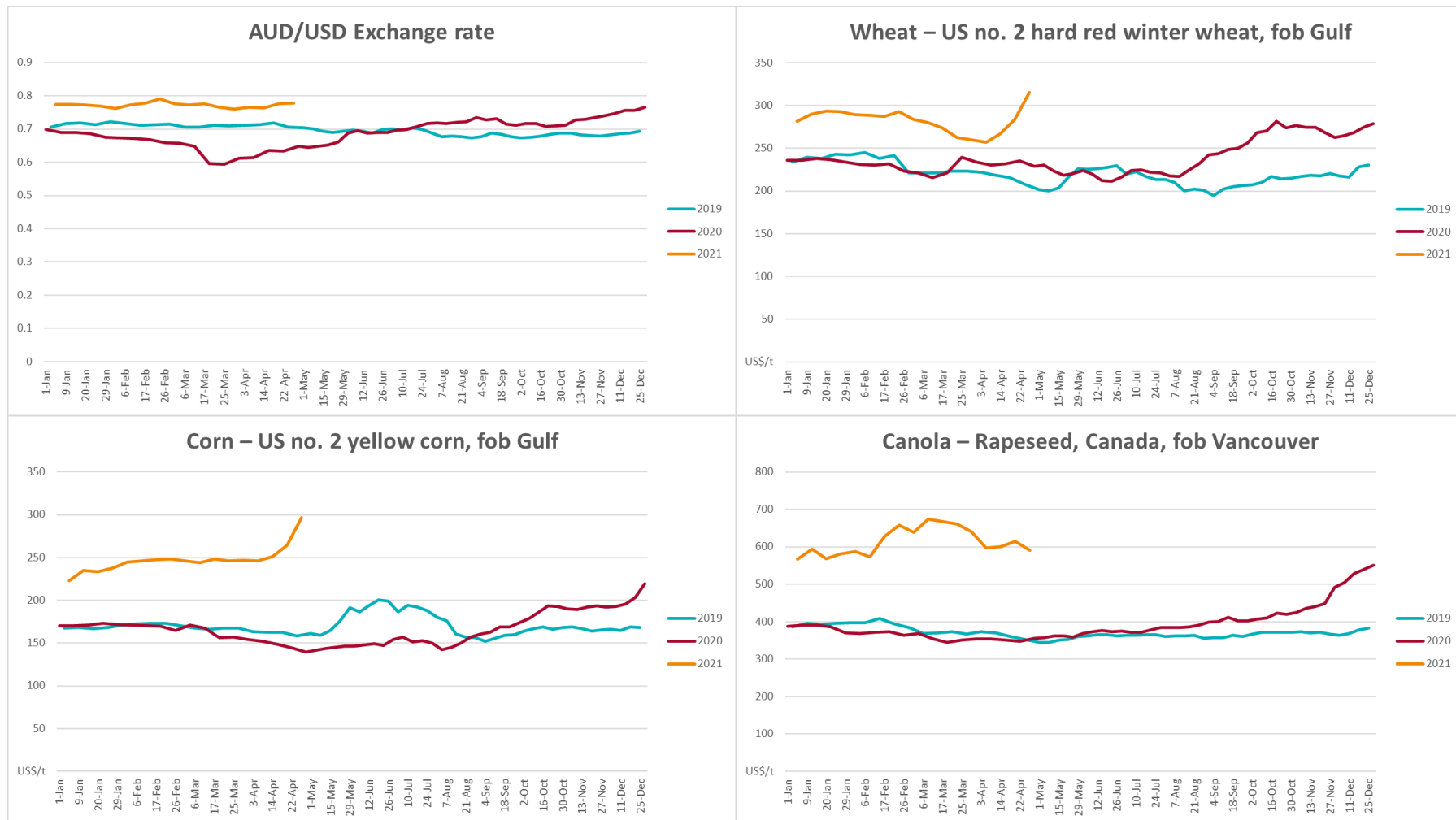
3. Commodities

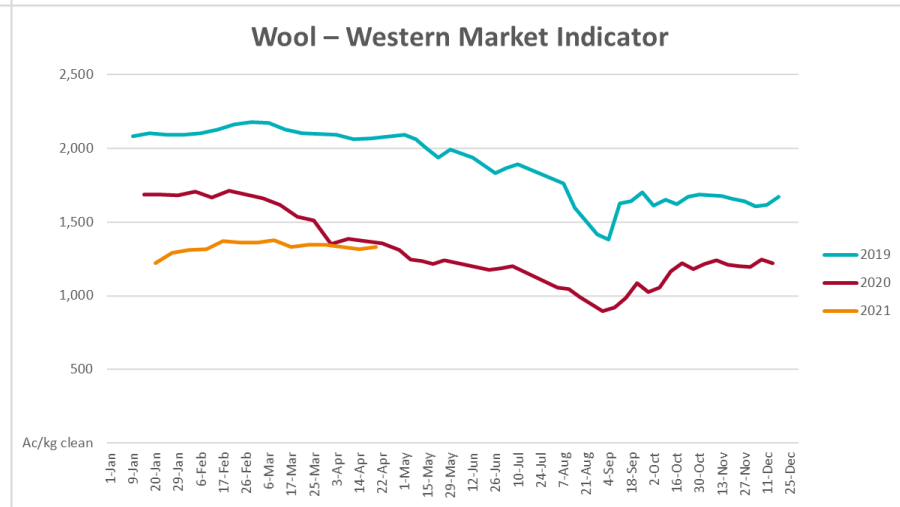
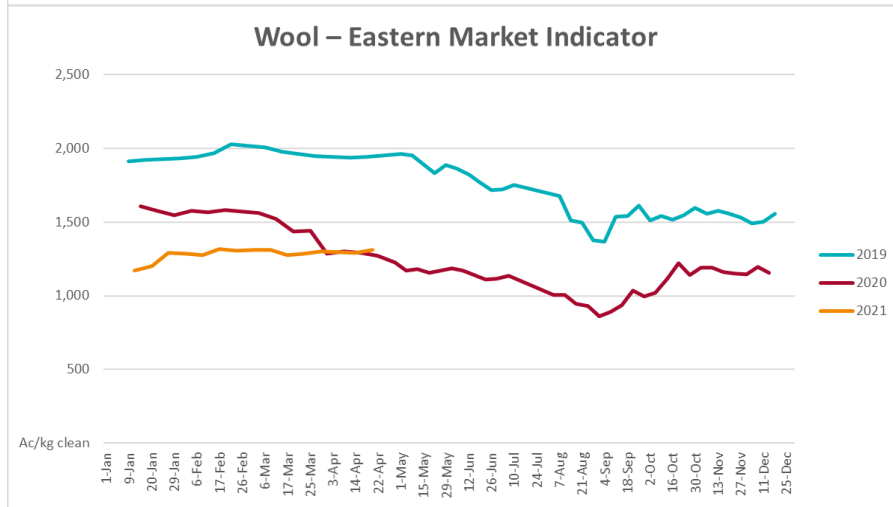
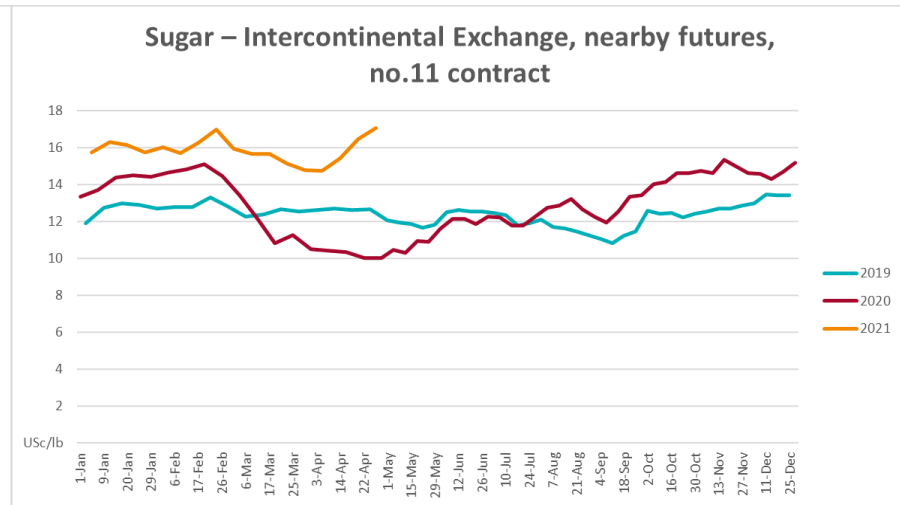
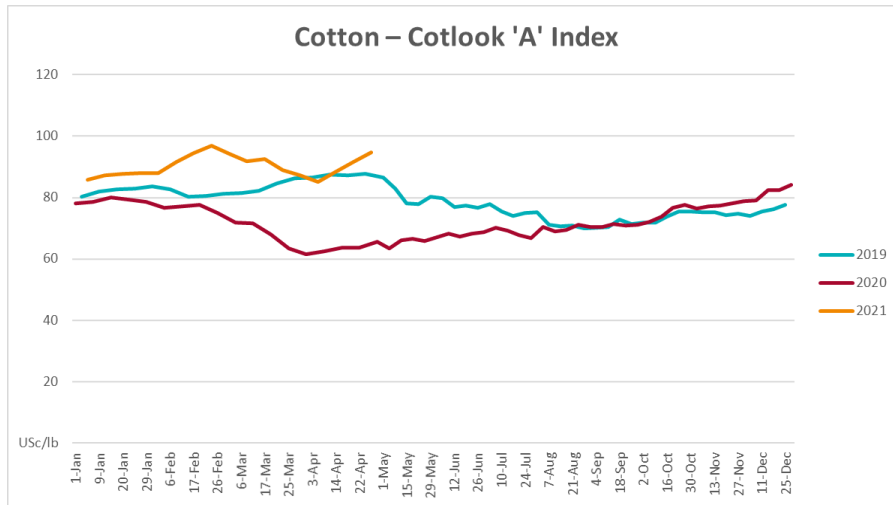
Indicator	Week ended	Unit	Latest price	Previous week	Weekly change	Price 12 months ago	Annual change
Selected world indicator prices							
AUD/USD Exchange rate	28-Apr	A\$/US\$	0.78	0.78	0%	0.64	21%
Wheat – US no. 2 hard red winter wheat, fob Gulf	28-Apr	US\$/t	315	284	11%	230	37%
Corn – US no. 2 yellow corn, fob Gulf	28-Apr	US\$/t	296	264	12%	142	109%
Canola – Rapeseed, Canada, fob Vancouver	28-Apr	US\$/t	590	616	-4%	357	65%
Cotton – Cotlook 'A' Index	28-Apr	USc/lb	95	92	3%	64	49%
Sugar – Intercontinental Exchange, nearby futures, no.11 contract	28-Apr	USc/lb	17	16	4%	10	63%
Wool – Eastern Market Indicator	21-Apr	Ac/kg clean	1,312	1,291	2%	1,521	-14%
Wool – Western Market Indicator	21-Apr	Ac/kg clean	1,329	1,318	1%	1,683	-21%
Selected Australian grain export prices							
Milling Wheat – APW, Port Adelaide, SA	28-Apr	A\$/t	360	353	2%	426	-16%
Feed Wheat – ASW, Port Adelaide, SA	28-Apr	A\$/t	357	351	2%	425	-16%
Feed Barley – Port Adelaide, SA	28-Apr	A\$/t	294	293	0%	328	-10%
Canola – Kwinana, WA	28-Apr	A\$/t	717	711	1%	632	13%
Grain Sorghum – Brisbane, QLD	28-Apr	A\$/t	347	348	0%	458	-24%
Selected domestic livestock indicator prices							
Beef – Eastern Young Cattle Indicator	28-Apr	Ac/kg cwt	903	909	-1%	650	39%
Mutton – Mutton indicator (18–24 kg fat score 2–3), Vic	28-Apr	Ac/kg cwt	646	668	-3%	699	-8%
Lamb – Eastern States Trade Lamb Indicator	28-Apr	Ac/kg cwt	809	805	0%	941	-14%
Pig – Eastern Seaboard (60.1–75 kg), average of buyers & sellers	14-Apr	Ac/kg cwt	359	338	6%	396	-9%
Goats – Eastern States (12.1–16 kg)	28-Apr	Ac/kg cwt	855	838	2%	820	4%
Live cattle – Light steers ex Darwin to Indonesia	17-Feb	Ac/kg lwt	355	355	0%	360	-1%
Live sheep – Live wethers (Muchea WA saleyard) to Middle East	10-Mar	\$/head	134	134	0%	N/A	N/A

Indicator	Week ended	Unit	Latest price	Previous week	Weekly change	Price 12 months ago	Annual change
Global Dairy Trade (GDT) weighted average prices ^a							
Dairy – Whole milk powder	21-Apr	US\$/t	4,097	4,085	0%	3,186	29%
Dairy – Skim milk powder	21-Apr	US\$/t	3,365	3,367	0%	2,462	37%
Dairy – Cheddar cheese	21-Apr	US\$/t	4,436	4,393	1%	4,036	10%
Dairy – Anhydrous milk fat	21-Apr	US\$/t	6,003	6,209	-3%	5,662	6%

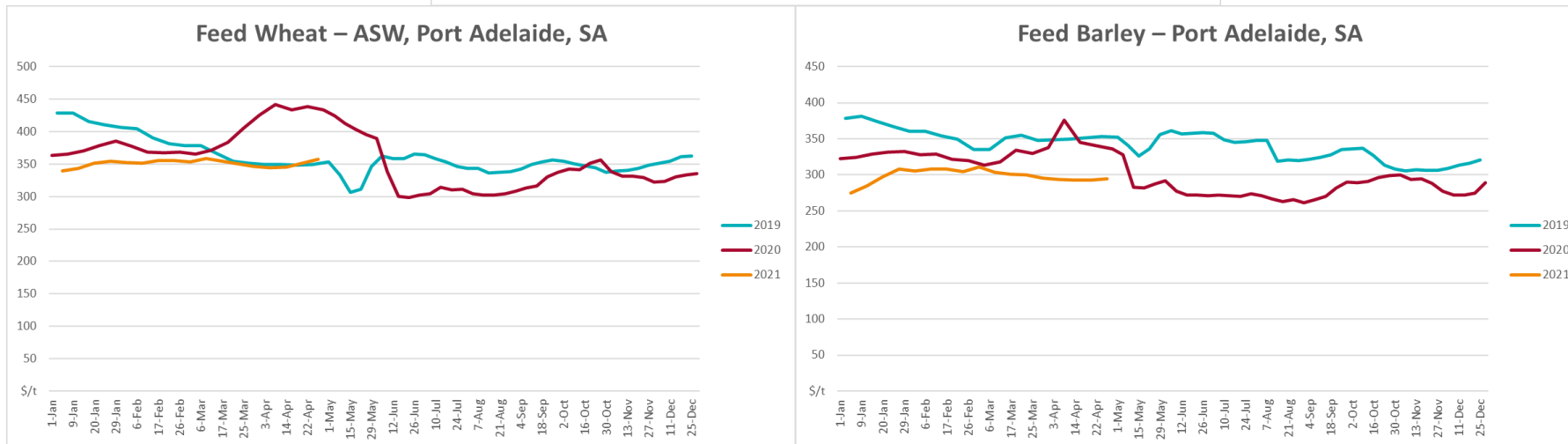
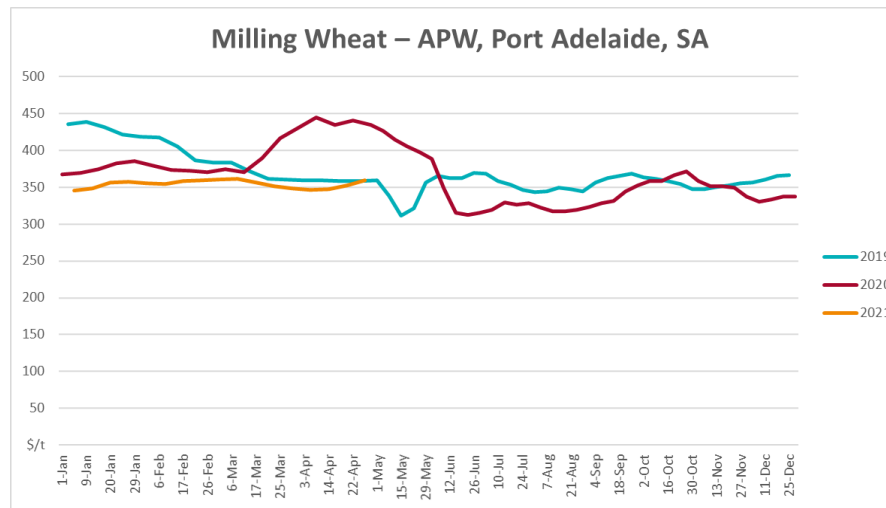
^a Global Dairy Trade prices are updated twice monthly on the first and third Tuesday of each month.

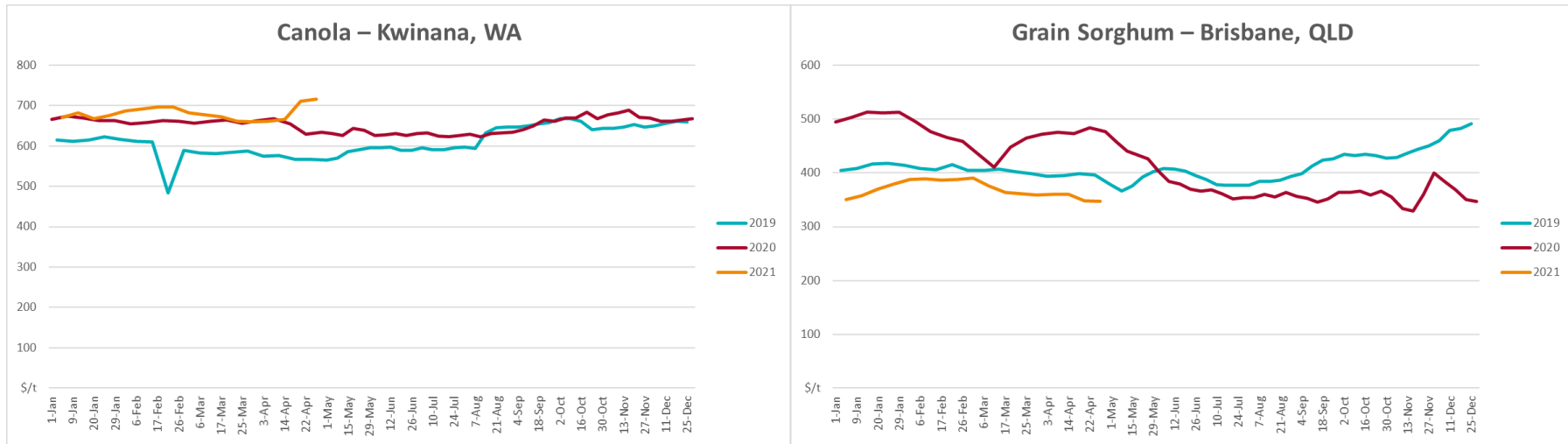
3.1. Selected world indicator prices



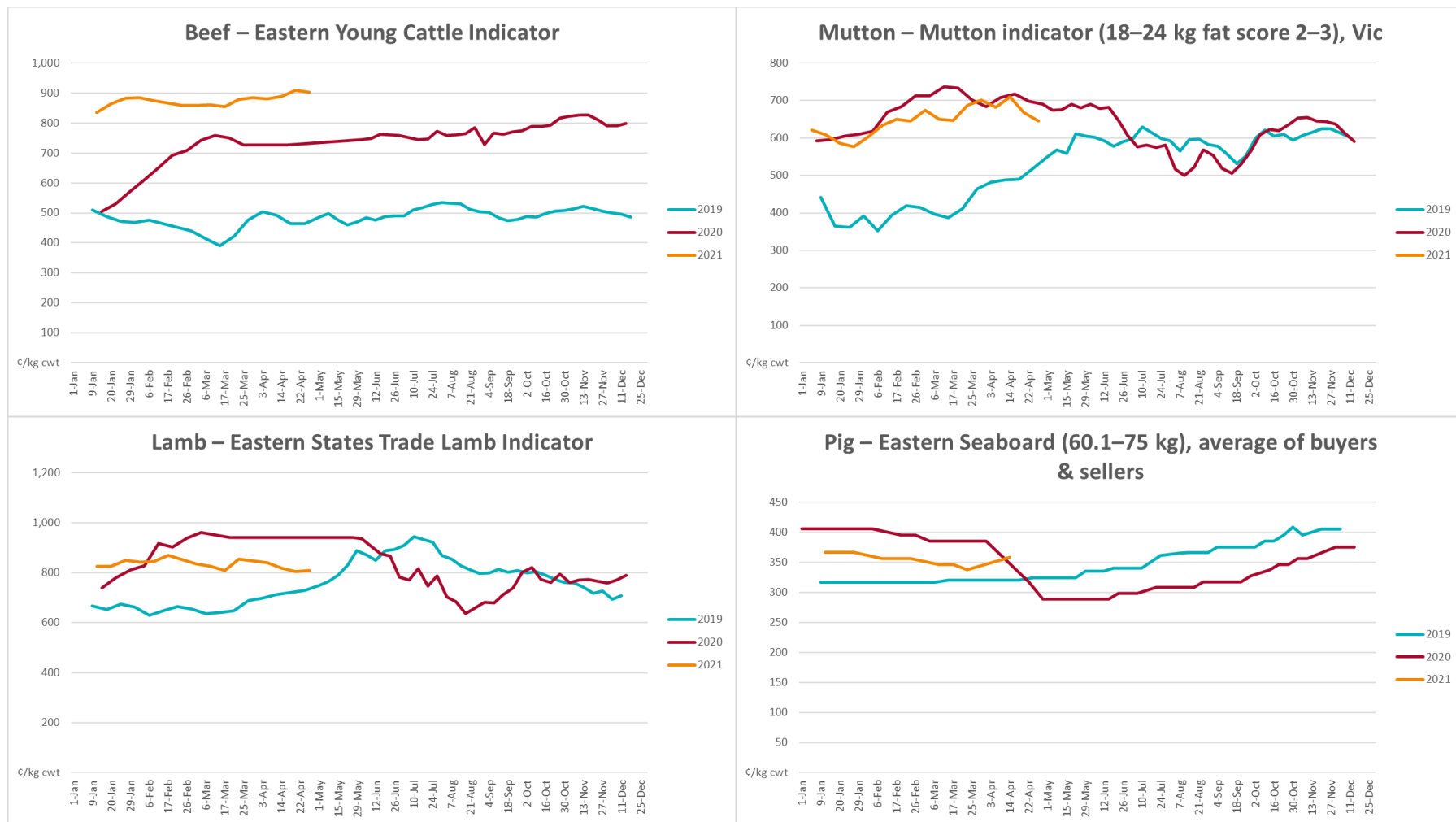


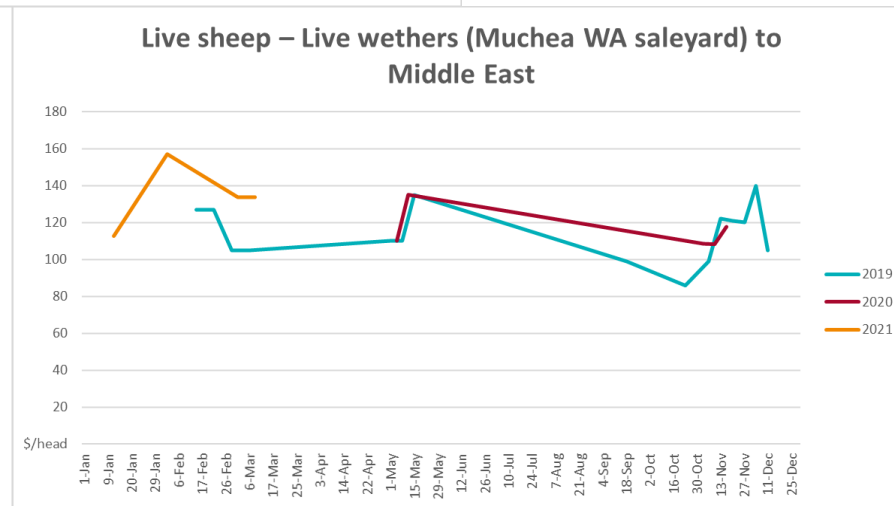
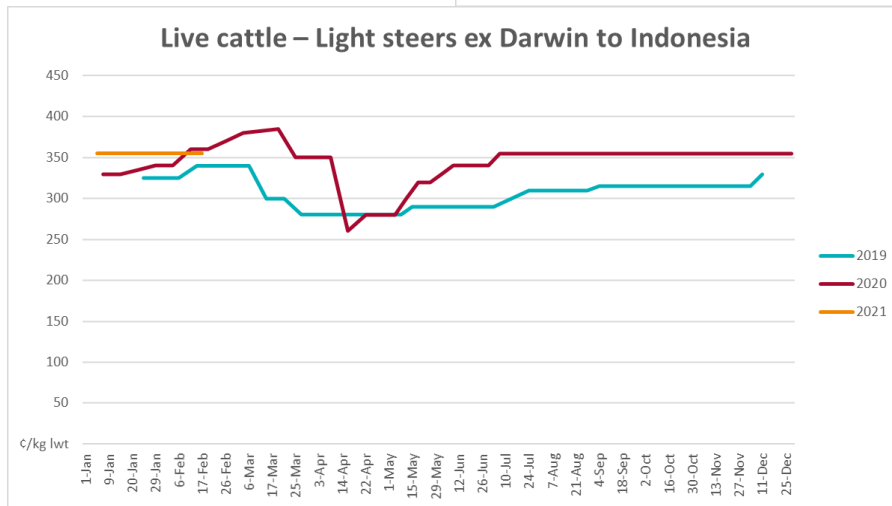
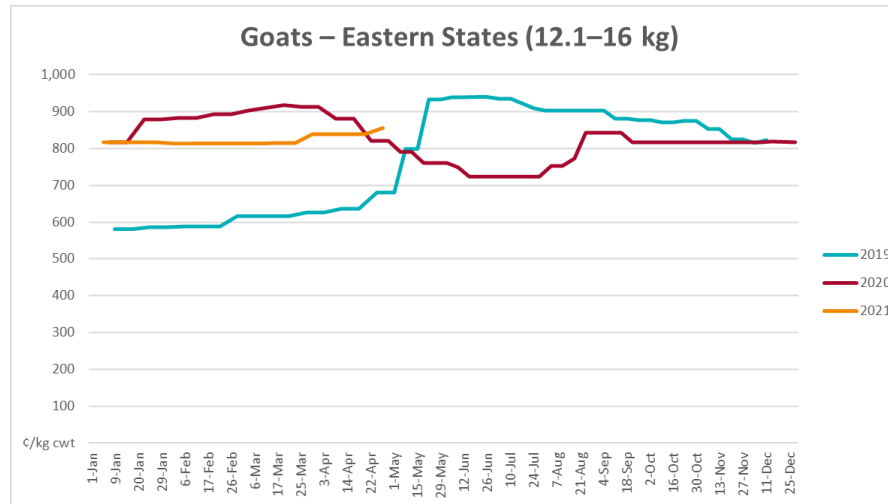
3.2. Selected domestic crop indicator prices



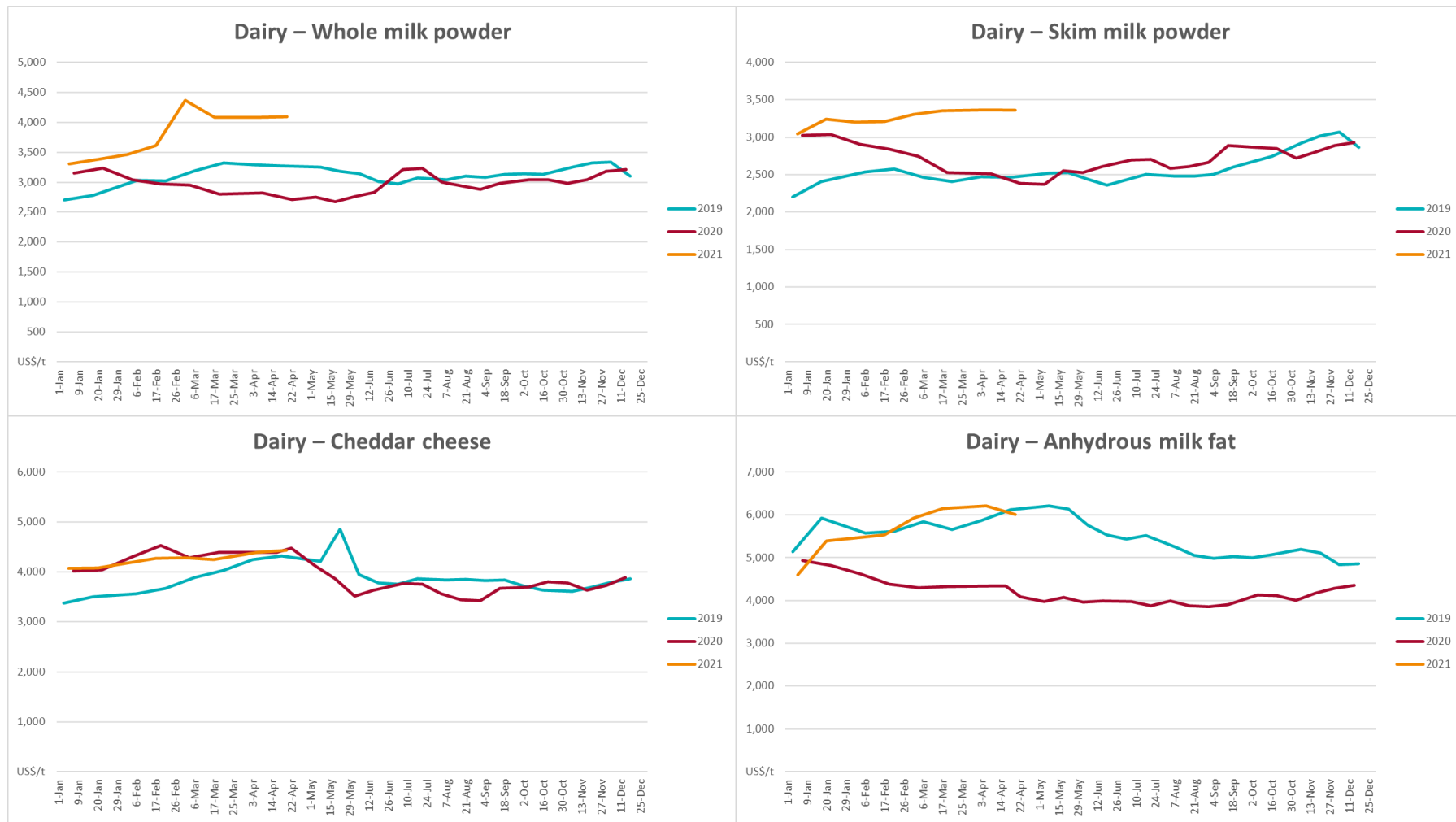


3.3. Selected domestic livestock indicator prices

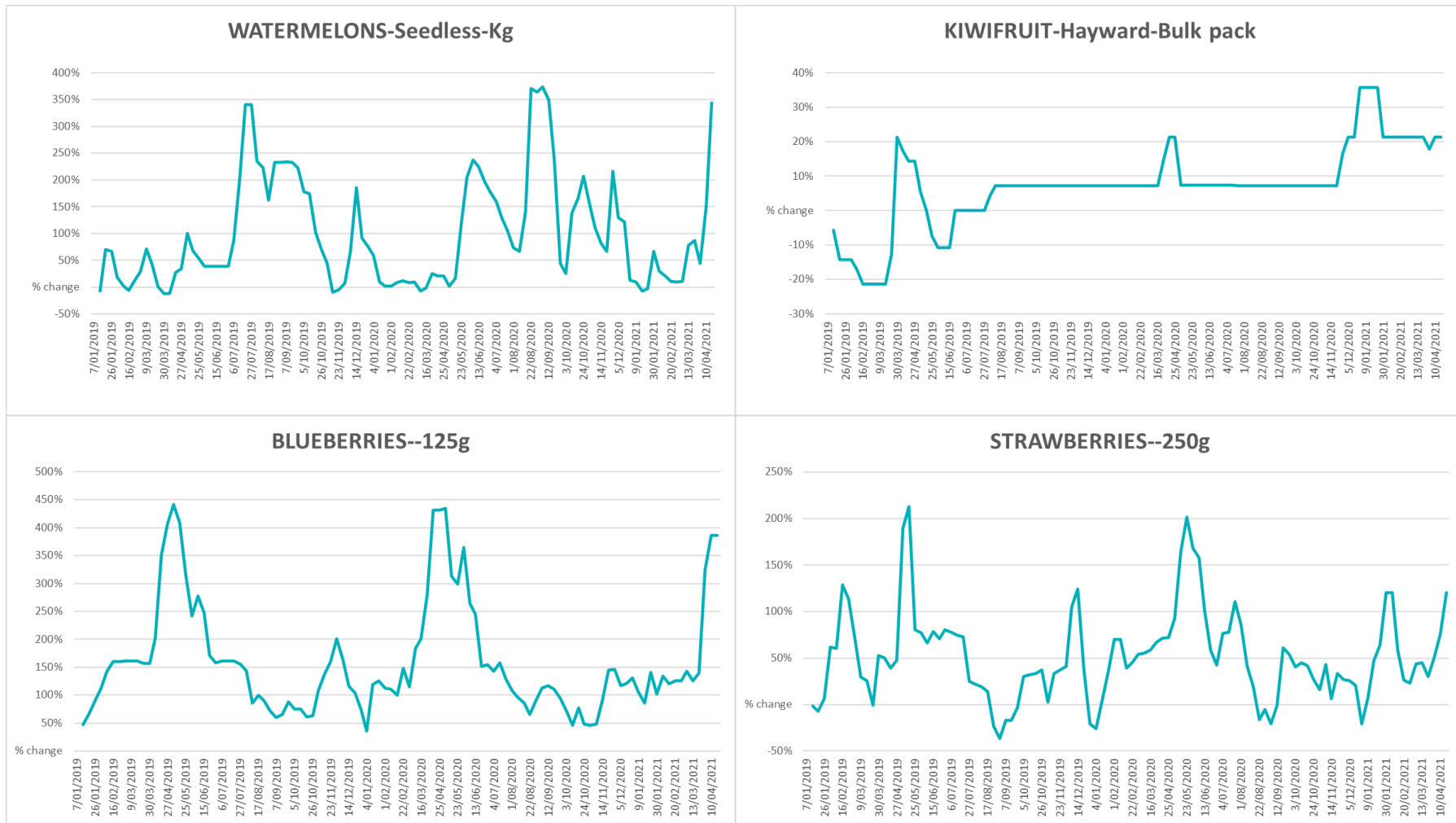




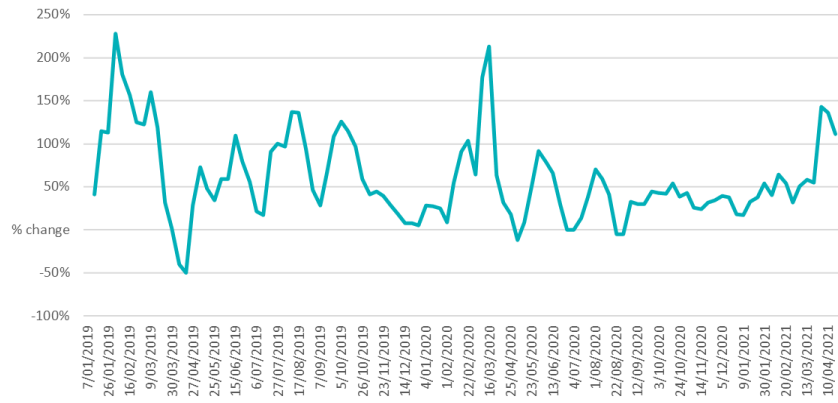
3.4. Global Dairy Trade (GDT) weighted average prices



3.5. Selected fruit and vegetable prices



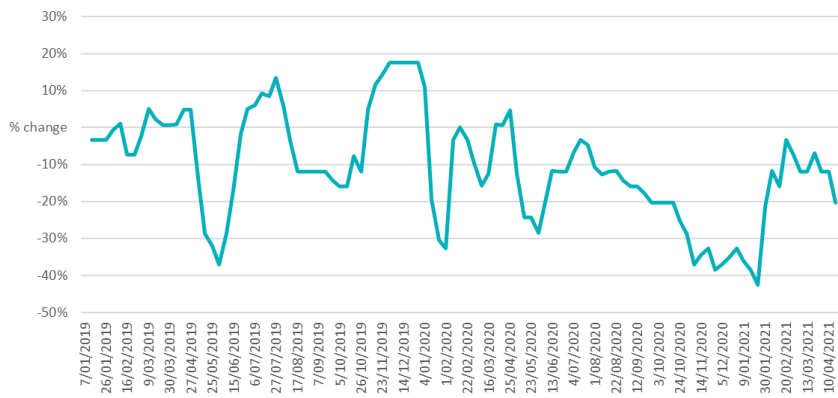
BANANAS-Cavendish-Carton



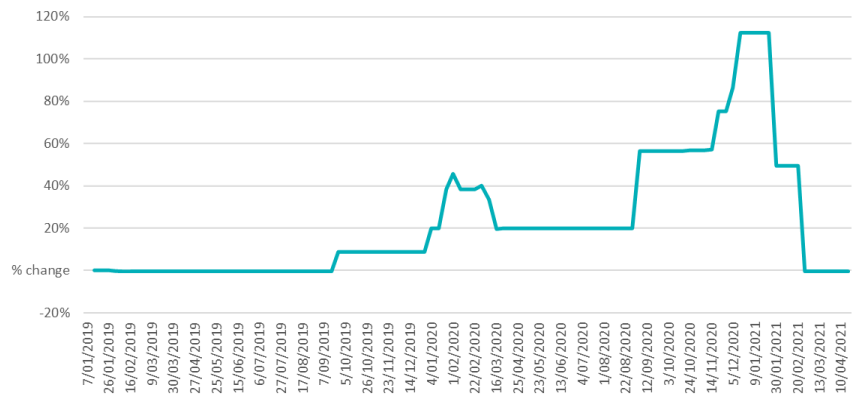
AVOCADOS-Hass-Tray



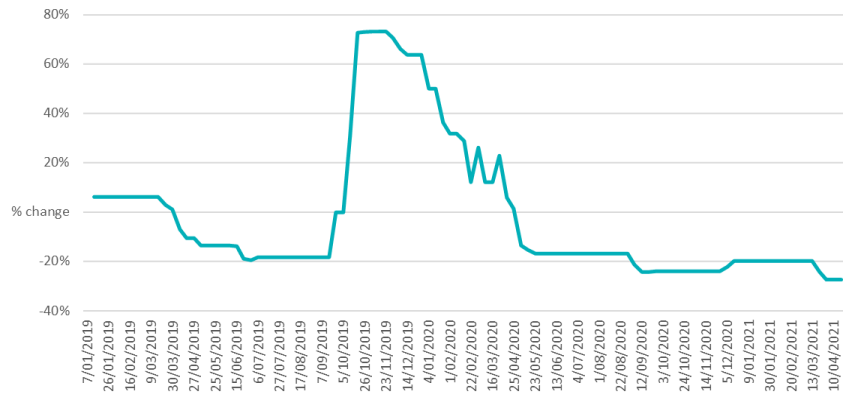
PINEAPPLES-Smoothleaf-Tray



APPLES-Royal Gala-12kg carton



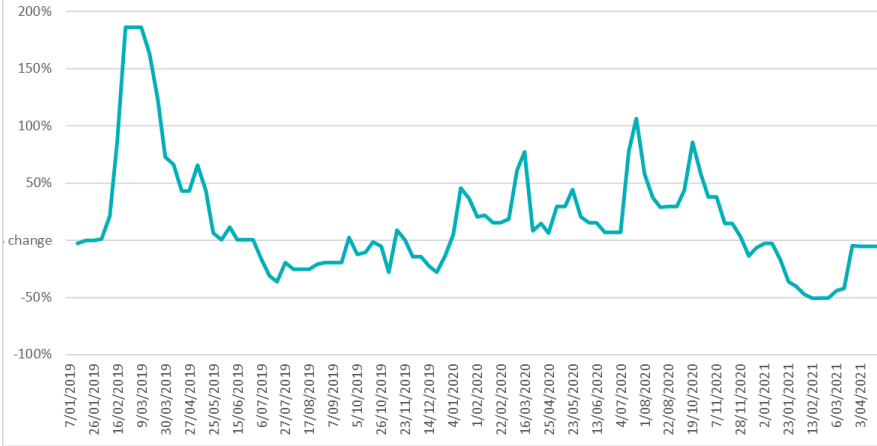
ONIONS-Brown-20Kg bag



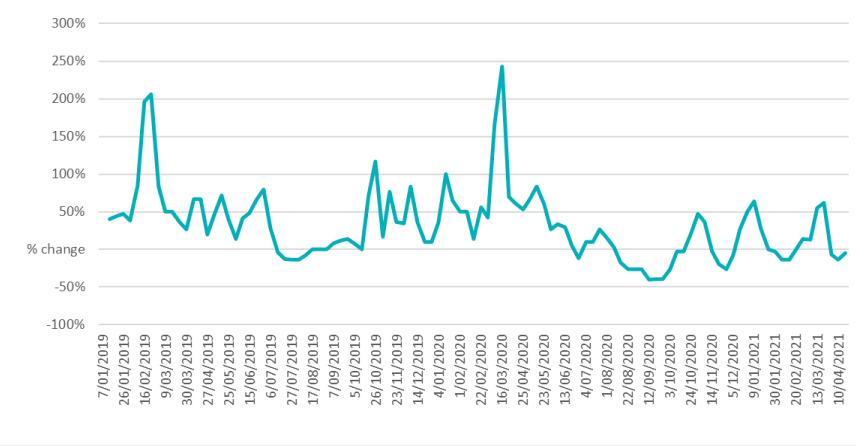
PUMPKINS-Grey Bulk-Kg



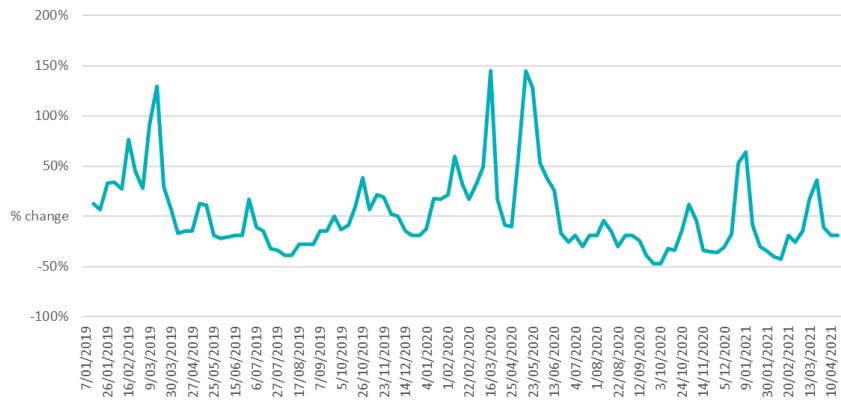
TOMATOES-Gourmet-9Kg carton



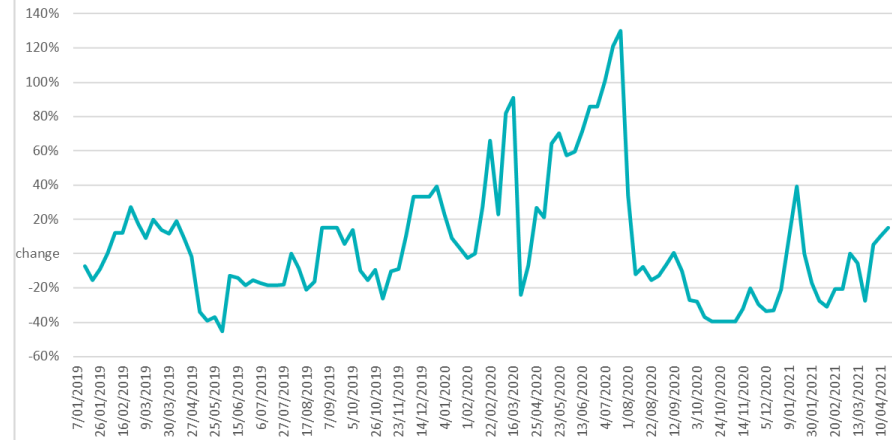
BROCCOLI-A Grade-8Kg pack



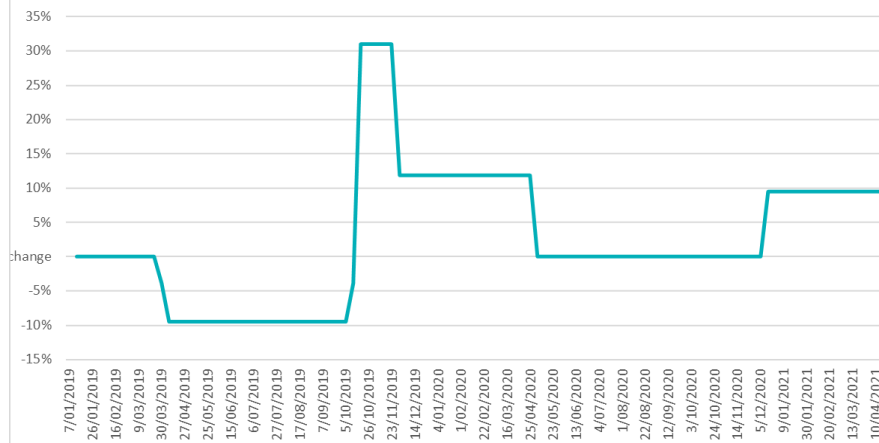
CAULIFLOWERS--Carton



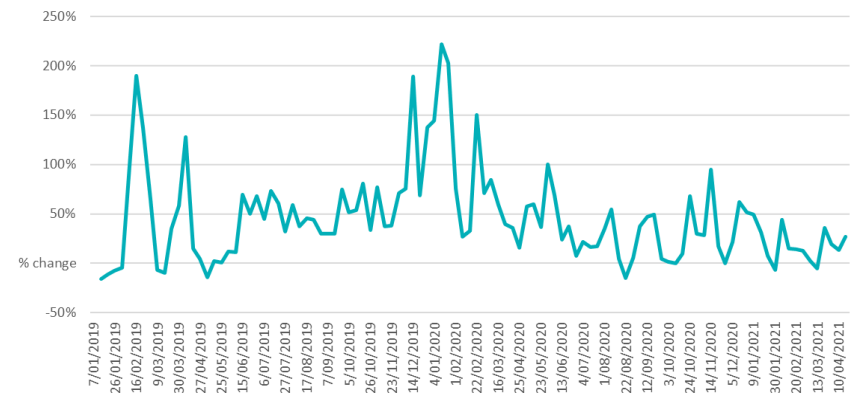
LETTUCE-Iceberg-Carton



POTATOES-Brushed White-20Kg bag



BEANS-Round Stemless-Kg



4. Data attribution

Climate

Bureau of Meteorology

- Weekly rainfall totals: www.bom.gov.au/jsp/awap/rain/index.jsp
- Monthly and last 3-month rainfall percentiles: www.bom.gov.au/jsp/awap/rain/index.jsp
- Temperature anomalies: www.bom.gov.au/jsp/awap/temp/index.jsp
- Rainfall forecast: www.bom.gov.au/jsp/watl/rainfall/pme.jsp
- Seasonal outlook: www.bom.gov.au/climate/outlooks/#/overview/summary/
- Drought statement: www.bom.gov.au/climate/drought/drought.shtml
- Soil moisture: www.bom.gov.au/water/landscape/

Other

- Pasture growth: <https://www.longpaddock.qld.gov.au/aussiegrass/>
- 3-month global outlooks: [Environment and Climate Change Canada](#), [NOAA Climate Prediction Center](#), [EUROBRISA CPTC/INPE](#), [European Centre for Medium-Range Weather Forecasts](#), [Hydrometcenter of Russia](#), [National Climate Center Climate System Diagnosis and Prediction Room \(NCC\)](#), [International Research Institute for Climate and Society](#)
- Global production: <https://ipad.fas.usda.gov/ogamaps/cropmapsandcalendars.aspx>
- Autumn break: Pook et al., 2009, <https://rmets-onlinelibrary-wiley-com.virtual.anu.edu.au/doi/epdf/10.1002/joc.1833>

Water

New South Wales

- New South Wales Water Information: <http://waterinfo.nsw.gov.au/>
- New South Wales Office of Water, Department of Primary Industries: www.water.nsw.gov.au/Home/default.aspx
- Available water determinations register: www.water.nsw.gov.au/water-licensing/registers

Queensland

- Sunwater: www.sunwater.com.au
- Seqwater: <http://seqwater.com.au>

South Australia

- SA Water: www.sawater.com.au/community-and-environment/the-river-murray/river-reports/daily-flow-report
- South Australian Department of Environment, Water and Natural Resources: www.environment.sa.gov.au

Victoria

- Goulburn–Murray Water: www.g-mwater.com.au

Commodities

Fruit and vegetables

- Datafresh: www.freshstate.com.au

Pigs

- Australian Pork Limited: www.australianpork.com.au

Dairy

- Global Dairy Trade: www.globaldairytrade.info/en/product-results/

World wheat, canola

- International Grains Council

World coarse grains

- United States Department of Agriculture

World cotton

- Cotlook: www.cotlook.com/

World sugar

- New York Stock Exchange - Intercontinental Exchange

Wool

- Australian Wool Exchange: www.awex.com.au/

Domestic wheat, barley, sorghum and canola

- Jumbuk Consulting Pty Ltd: <http://www.jumbukag.com.au/>

Cattle, beef, mutton, lamb, goat and live export

- Meat and Livestock Australia: www.mla.com.au/Prices-and-market

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