



Weekly Australian Climate, Water and Agricultural Update



No. 29/2021

29 July 2021

Summary of key issues

- During the week ending 28 July 2021, cold fronts and troughs brought rainfall to much of southern Australia. A high-pressure system and associated cloud free skies saw little to no rainfall across the northern half of the country ([see Section 1.1](#)).
- Soil moisture levels across most cropping regions continue to be favourable and likely supported on-going crop development, even in regions that received little to no rainfall. Previously dry areas of eastern South Australia and north-western Victoria received 10 to 25 millimetres over the past week providing some much-needed moisture to boost plant growth in these regions.
- An early northern rainfall onset for the 2021–22 season is more likely across most of northern Australia, according to the latest northern rainfall onset outlook released by the Bureau of Meteorology. An early onset of the 2021–22 northern wet season is likely to boost soil moisture and water storages, and benefit summer crop production and northern pasture growth ([see Section 1.2](#)).
- Low pressure systems and cold fronts across southern Australia are likely to bring rainfall to parts of New South Wales, Victoria, South Australia, Western Australia, and Tasmania over the next 8 days to 5 August 2021. High pressure systems are likely to prevent substantial rainfalls for northern parts of Australia ([see Section 1.3](#)).
- The forecast rainfall for cropping regions will continue to support the growth of early sown crops and establishment of later sown crops, as well as boosting soil moisture. However, the forecast rainfall for parts of south-western Western Australia, on the other hand, may exacerbate waterlogging, negatively affecting crop growth.
- Water storage in the Murray–Darling Basin (MDB) increased by 734 gigalitres (GL) between 21 July 2021 and 28 July 2021. The current volume of water held in storage is 18,547 GL, which represents 73% of total capacity. This is 56% or 6,672 GL more than at the same time last year.
- Allocation prices in the Victorian Murray below the Barmah Choke decreased from \$159 per ML on 19 July 2021 to \$129 per ML on 25 July 2021. Prices are lower in the Goulburn-Broken, Murrumbidgee, and regions above the Barmah choke due to the binding of the Goulburn intervalley trade limit, Murrumbidgee export limit, and Barmah choke trade constraint.

1. Climate

1.1. Rainfall this week

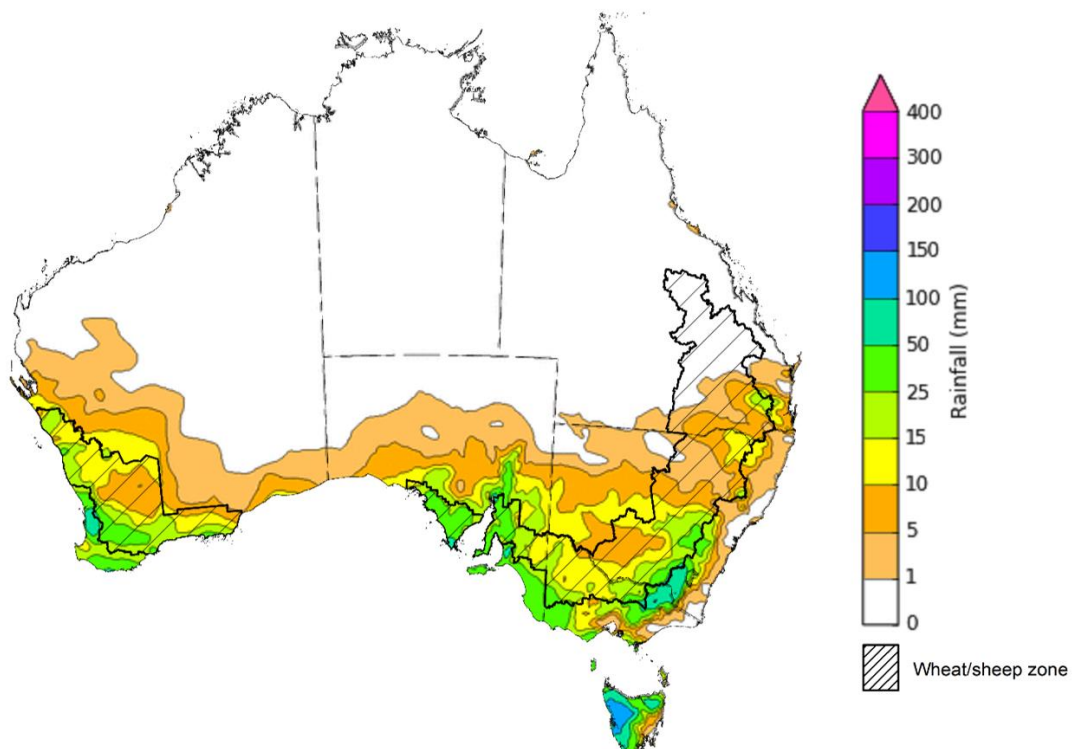
During the week ending 28 July 2021, cold fronts and troughs brought rainfall to much of southern Australia early in the week. High-pressure systems resulted in clear conditions in the middle of the week across much of southern Australia, with cold fronts, troughs and rainfall returning toward the end of the week. Conditions remained dry across northern Australia throughout the week.

Rainfall totals of between 10 and 50 millimetres were recorded across parts of southern, central and north-eastern New South Wales, isolated areas of south-eastern Queensland, much of Victoria, the south of South Australia, the south-west of Western Australia and parts of Tasmania. Rainfall totals in excess of 50 millimetres were recorded in alpine regions of New South Wales and Victoria, western Tasmania and isolated parts of Western Australia.

In cropping regions, rainfall totals of between 10 and 50 millimetres were recorded in parts of eastern, central and northern New South Wales, Victoria, South Australia and northern and southern Western Australia, and isolated parts of south-east Queensland. Little to no rainfall was recorded across cropping regions in north-western New South Wales and most Queensland during the week ending 28 July 2021.

Soil moisture levels across most cropping regions continue to be favourable and likely supported ongoing crop development, even in areas where little to no rainfall was recorded this week. The wet conditions in some parts, such as central New South Wales and southern Western Australia, have restricted on-farm access, limiting the ability to apply nitrogen and spray crops. Those previously dry areas of eastern South Australia and north-western Victoria received 10 to 25 millimetres over the past week providing some much-needed moisture. However, further rainfall will be required in these areas to support ongoing crop development and yield potential.

Rainfall for the week ending 28 July 2021



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Issued: 28/07/2021

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/>

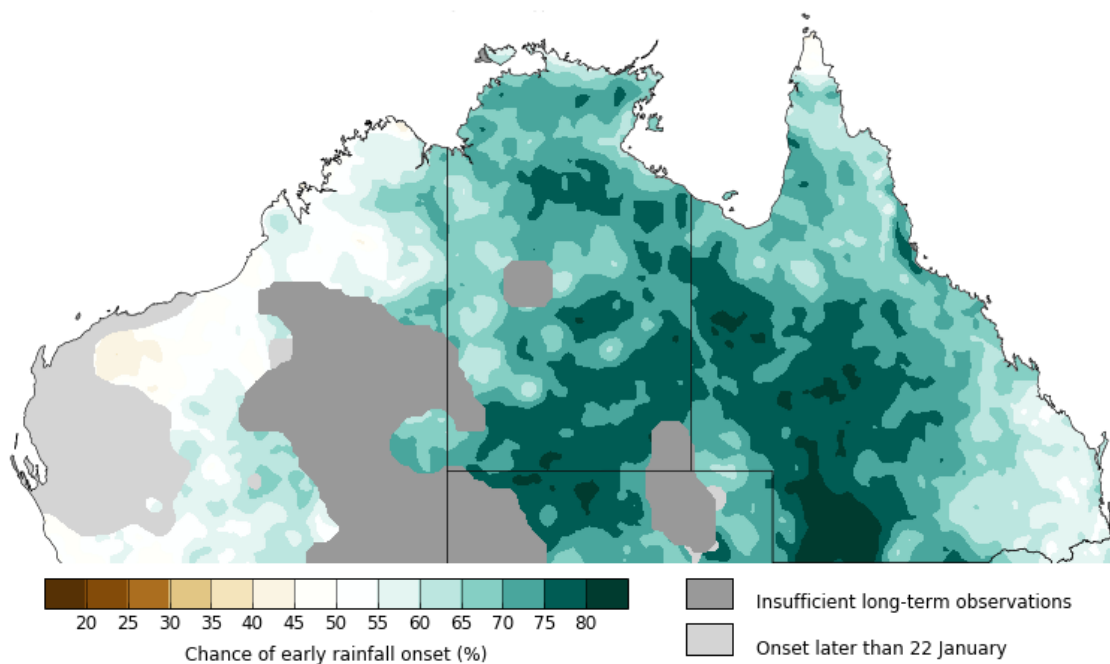
1.2. Northern rainfall onset outlook

The northern rainfall onset outlook provides an indication of whether the first significant rains after the dry season are likely to be earlier or later than normal. The onset occurs when the total rainfall after 1 September reaches 50 millimetres, this is considered approximately the amount of rainfall required to stimulate plant growth. Coastal parts of northern Australia usually accumulate 50 millimetres of rainfall by late October or early November, spreading to inland areas over subsequent weeks.

An early northern rainfall onset for 2021–22 season is more likely across most of northern Australia, according to the latest northern rainfall onset outlook released by the Bureau of Meteorology. The chance of an early rainfall onset is greater than 65% for most of Queensland, the Northern Territory, northern South Australia and parts of Western Australia. The La Niña event during spring-summer of 2020 also resulted in an early northern rainfall onset across much of northern Australia. In contrast, 2018 and 2019 had later than normal onsets, reducing the length of the dryland summer growing season and the recharge of water storages. An early onset of the 2021–22 northern wet season is likely to boost soil moisture and water storages, and benefit summer crop production and northern pasture growth.

Earlier than normal northern rainfall onset is associated with the possible emergence of a La Niña conditions in late spring, which some international climate models are predicting. In the Indian Ocean, negative Indian Ocean Dipole conditions are forecast out to November. This is also contributing to the higher likelihood of an earlier than normal northern rainfall onset.

Chance of early northern rainfall onset



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Model Run: 11/07/2021
Issued: 15/07/2021

1.3. Rainfall forecast for the next eight days

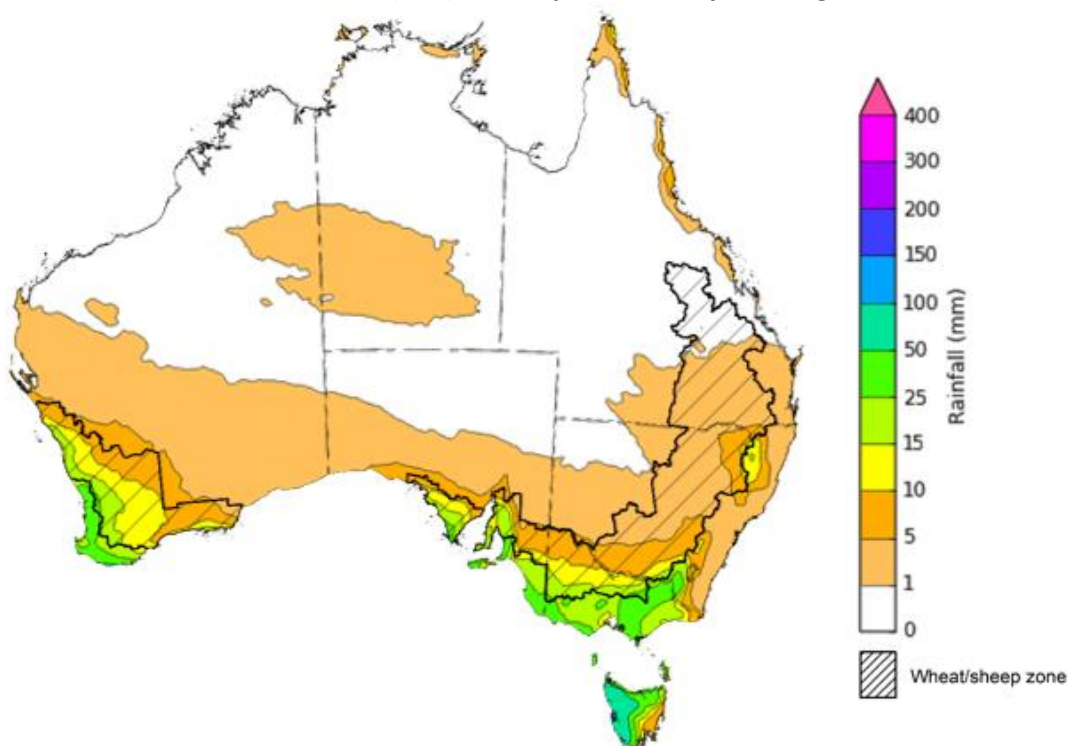
Low pressure systems and cold fronts across southern Australia are likely to bring rainfall to parts of New South Wales, Victoria, South Australia, Western Australia and Tasmania over the next 8 days to 5 August 2021. High pressure systems are likely to prevent substantial rainfalls for northern and central parts of Australia.

Rainfall totals of between 10 and 50 millimetres are forecast for isolated parts of New South Wales, as well as much of Victoria, the far south of South Australia, south-west Western Australia and much of Tasmania.

In Australia's cropping regions, rainfall totals of between 10 and 25 millimetres are forecast for southern Victoria, central and western South Australia and much of Western Australia. The forecast rainfall for cropping regions will continue to support the growth of early sown crops and establishment of later sown crops, as well as boosting soil moisture.

Soil moisture levels are average to above average across most eastern and western cropping regions, which will support ongoing crop growth and yield potential. The low rainfall expected for much of New South Wales will provide a reprieve from potential waterlogging, particularly in the central-west growing region. The forecast rainfall for parts of south-western Western Australia, on the other hand, may exacerbate waterlogging, negatively affecting crop growth. Some southern growing regions in Western Australia have already recorded rainfall totals double the July average leading to a complete saturation of the soil profile.

Total forecast rainfall (mm) for the period 29 July to 5 August 2021



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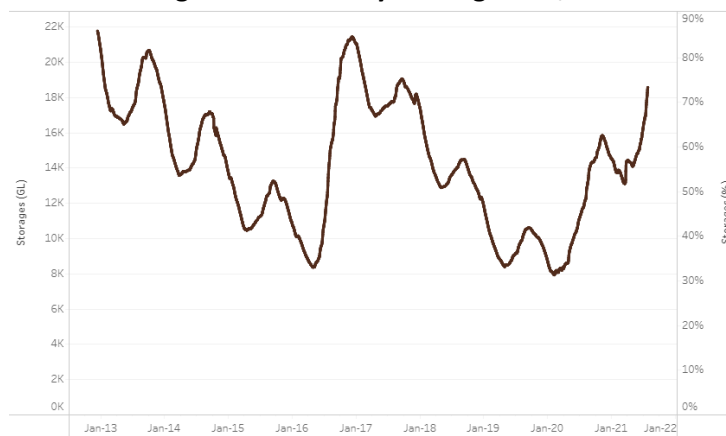
Note: This rainfall forecast is produced from computer models. As the model outputs are not altered by weather forecasters, it is important to check local forecasts and warnings issued by the Bureau of Meteorology.

2. Water

2.1. Water markets – current week

Water storage in the Murray–Darling Basin (MDB) increased by 734 gigalitres (GL) between 21 July 2021 and 28 July 2021. The current volume of water held in storage is 18,547 GL, which represents 73% of total capacity. This is 56% or 6,672 GL more than at the same time last year.

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

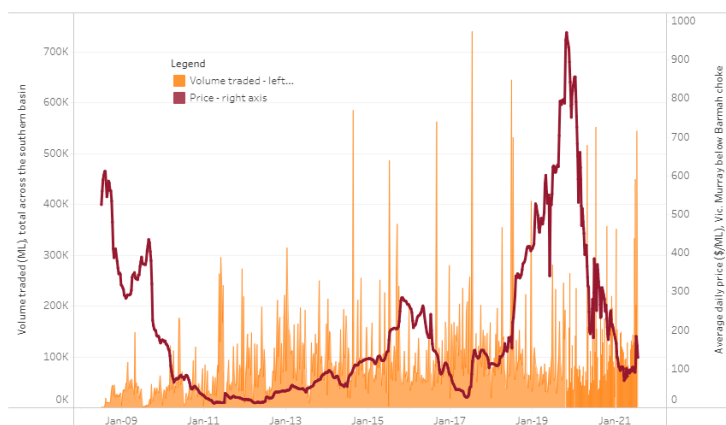


Water storage data is sourced from the Bureau of Meteorology.

Allocation prices in the Victorian Murray below the Barmah Choke decreased from \$159 per ML on 19 July 2021 to \$129 per ML on 25 July 2021. Prices are lower in the Goulburn-Broken, Murrumbidgee, and regions above the Barmah choke due to the binding of the Goulburn intervalley trade limit, Murrumbidgee export limit, and Barmah choke trade constraint.

Region	\$/ML
NSW Murray Above	87
NSW Murrumbidgee	77
VIC Goulburn-Broken	90
VIC Murray Below	129

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 July 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-290721

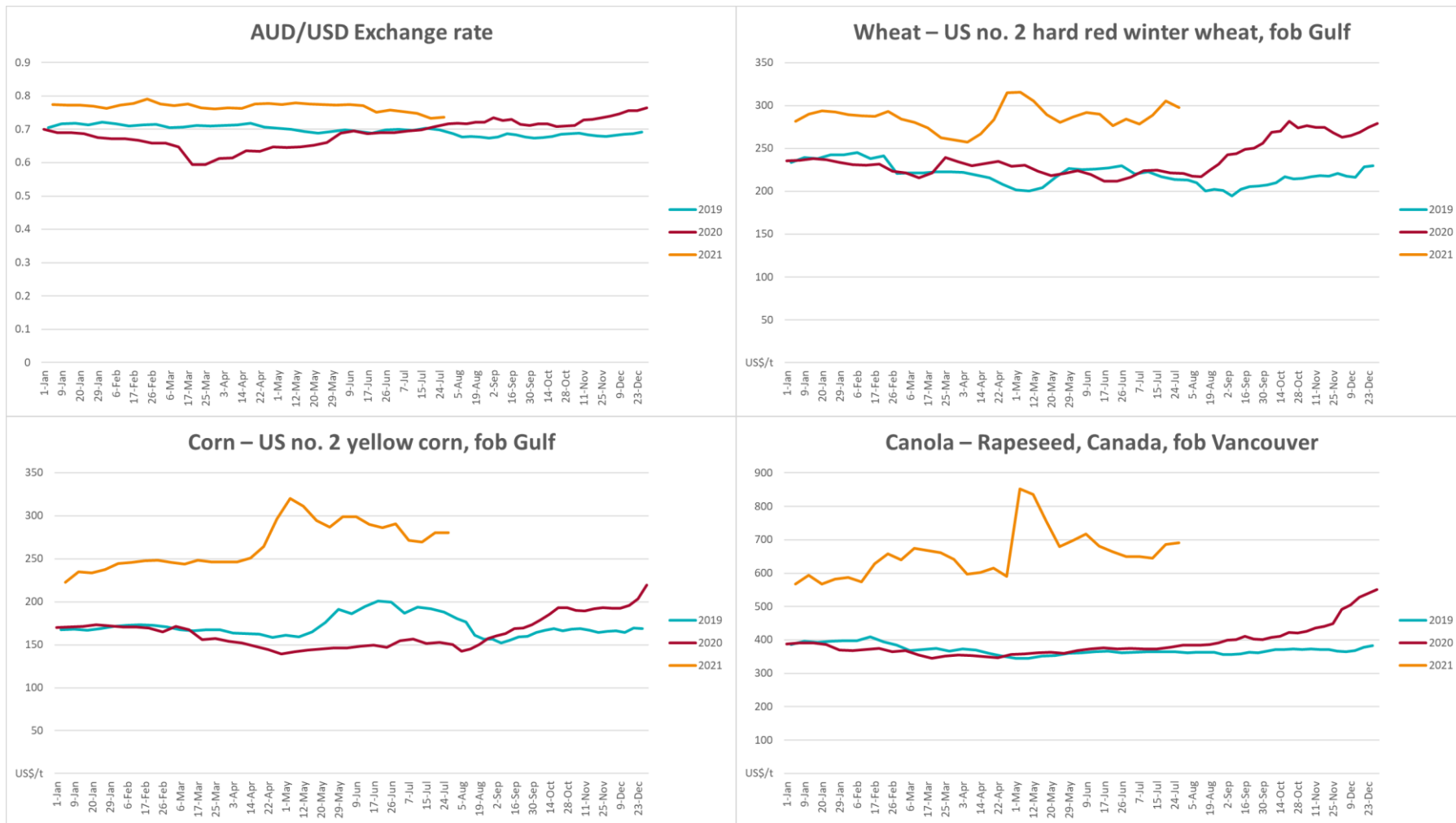
3. Commodities

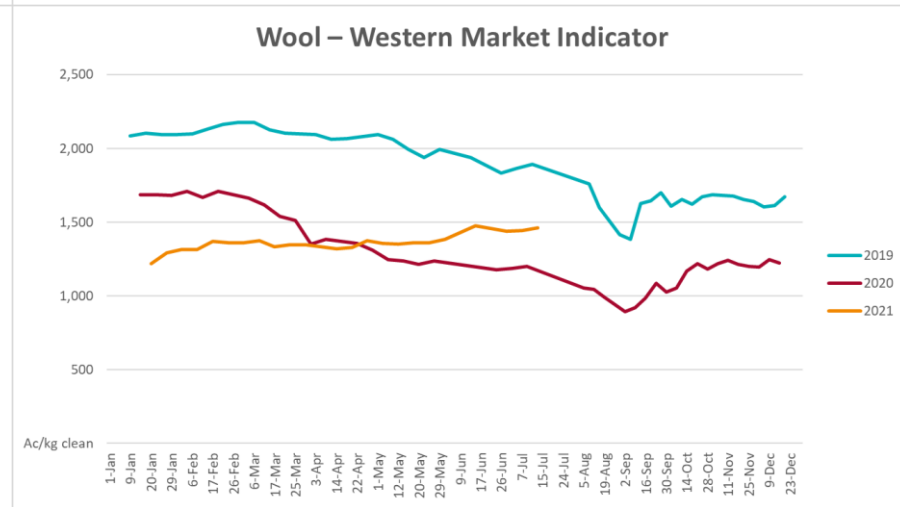
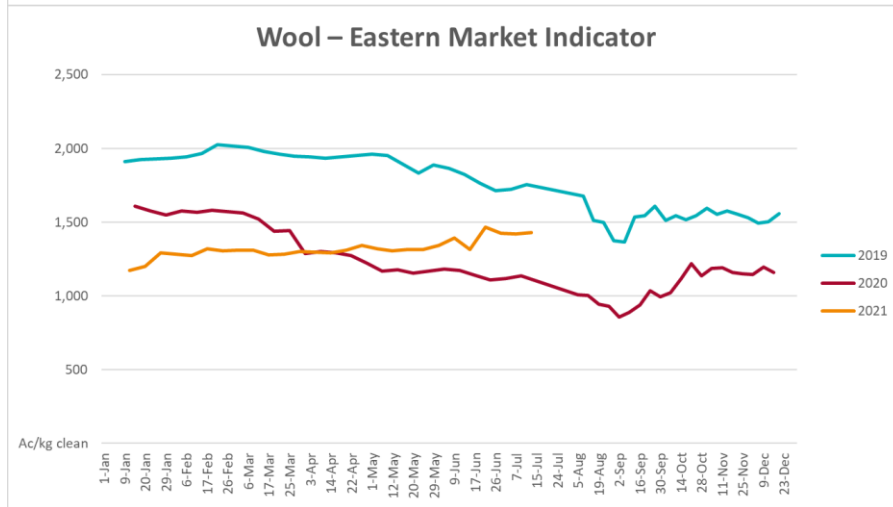
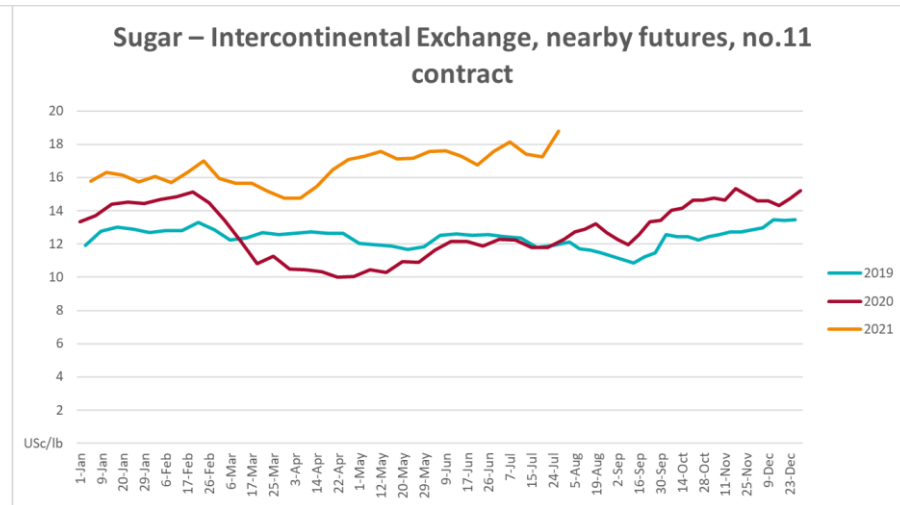
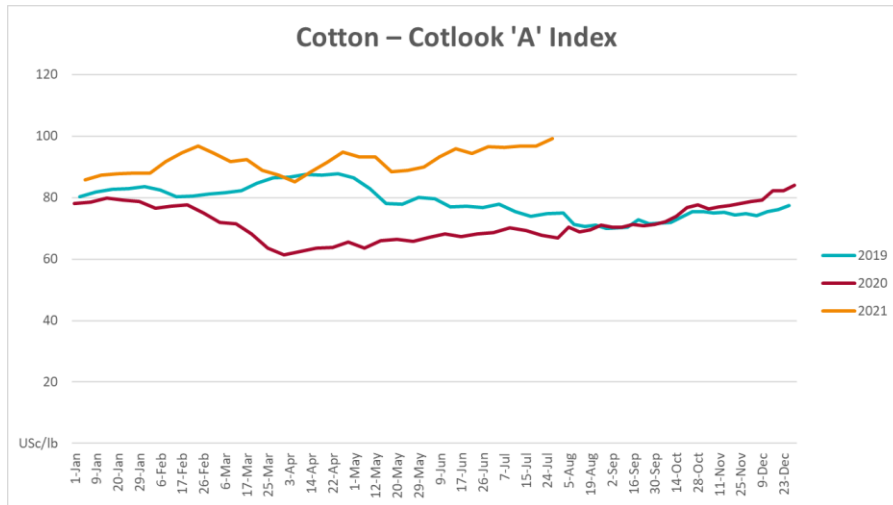
Indicator	Week ended	Unit	Latest price	Previous week	Weekly change	Price 12 months ago	Annual change
Selected world indicator prices							
AUD/USD Exchange rate	21-Jul	A\$/US\$	0.73	0.75	-2%	0.72	2%
Wheat – US no. 2 hard red winter wheat, fob Gulf	21-Jul	US\$/t	305	289	6%	221	38%
Corn – US no. 2 yellow corn, fob Gulf	21-Jul	US\$/t	280	269	4%	150	87%
Canola – Rapeseed, Canada, fob Vancouver	21-Jul	US\$/t	686	644	6%	384	79%
Cotton – Cotlook 'A' Index	21-Jul	USc/lb	97	97	0%	67	45%
Sugar – Intercontinental Exchange, nearby futures, no.11 contract	21-Jul	USc/lb	17.2	17.4	-1%	12	40%
Wool – Eastern Market Indicator	14-Jul	Ac/kg clean	1,428	1,420	1%	1,183	21%
Wool – Western Market Indicator	14-Jul	Ac/kg clean	1,462	1,442	1%	1,370	7%
Selected Australian grain export prices							
Milling Wheat – APW, Port Adelaide, SA	21-Jul	A\$/t	390	385	1%	328	19%
Feed Wheat – ASW, Port Adelaide, SA	21-Jul	A\$/t	390	377	3%	311	25%
Feed Barley – Port Adelaide, SA	21-Jul	A\$/t	321	317	1%	273	17%
Canola – Kwinana, WA	21-Jul	A\$/t	757	751	1%	626	21%
Grain Sorghum – Brisbane, QLD	21-Jul	A\$/t	368	374	-2%	355	4%
Selected domestic livestock indicator prices							
Beef – Eastern Young Cattle Indicator	21-Jul	Ac/kg cwt	991	968	2%	759	31%
Mutton – Mutton indicator (18–24 kg fat score 2–3), Vic	21-Jul	Ac/kg cwt	696	680	2%	580	20%
Lamb – Eastern States Trade Lamb Indicator	21-Jul	Ac/kg cwt	898	882	2%	906	-1%
Pig – Eastern Seaboard (60.1–75 kg), average of buyers & sellers	07-Jul	Ac/kg cwt	318	318	0%	386	-18%
Goats – Eastern States (12.1–16 kg)	23-Jun	Ac/kg cwt	875	872	0%	723	21%
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	19-May	\$/head	145	145	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-Jul	US\$/t	3,730	3,864	-3%	3,138	19%
Dairy – Skim milk powder	21-Jul	US\$/t	2,971	3,126	-5%	2,436	22%
Dairy – Cheddar cheese	21-Jul	US\$/t	4,022	3,949	2%	3,781	6%
Dairy – Anhydrous milk fat	21-Jul	US\$/t	5,615	5,632	0%	5,530	2%

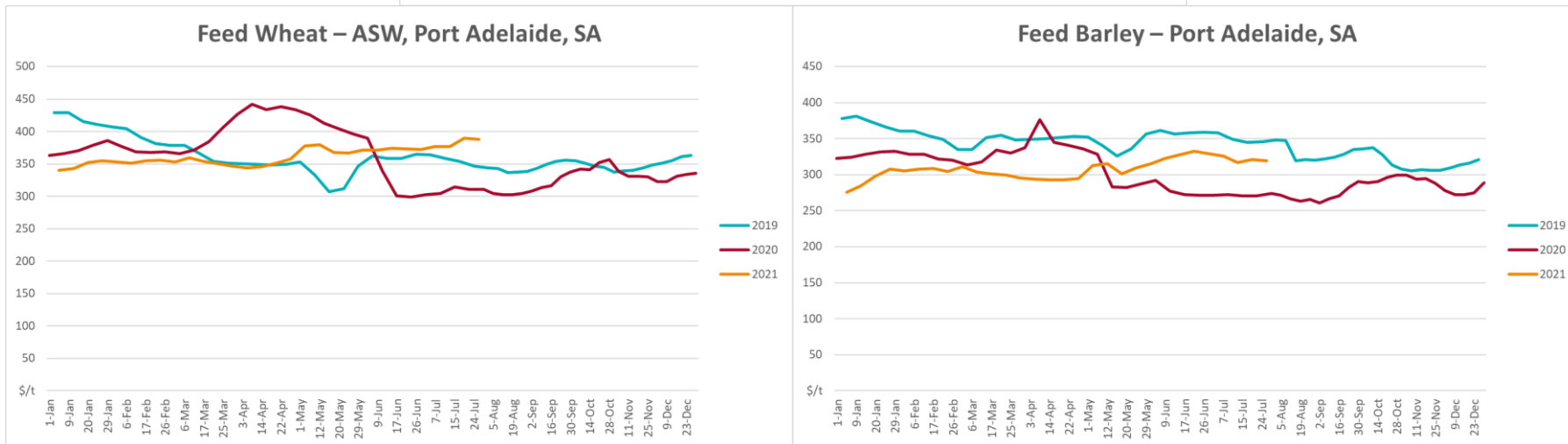
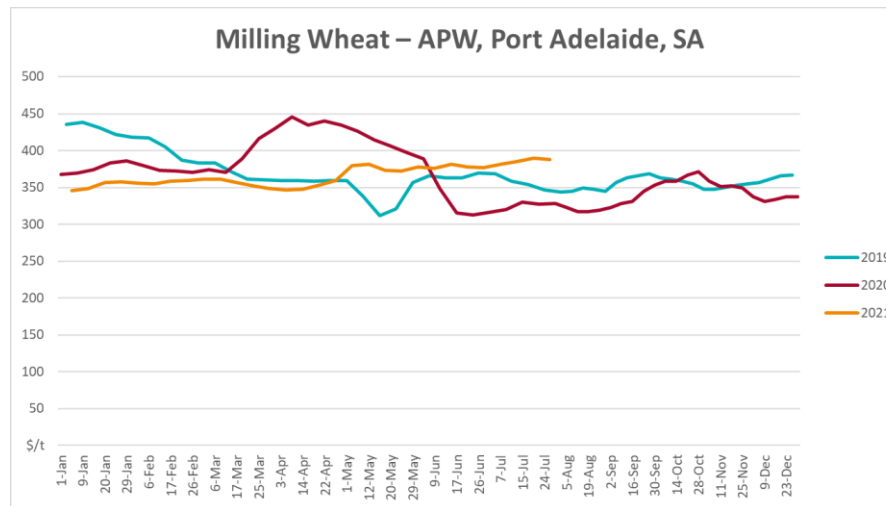
^a Global Dairy Trade prices are updated twice monthly on the first and third Tuesday of each month.

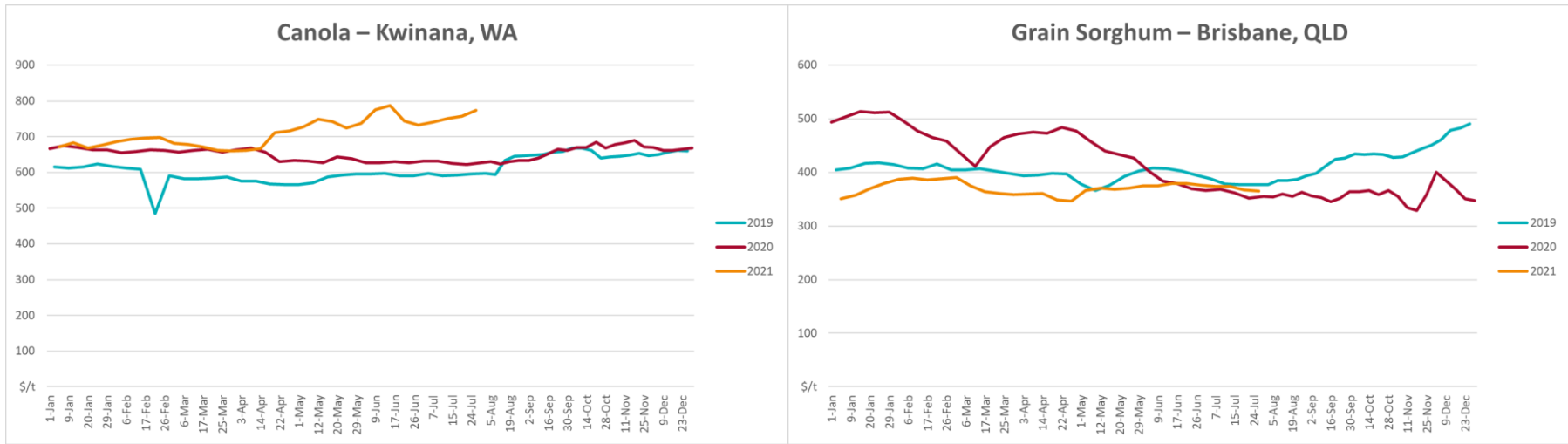
3.1. Selected world indicator prices



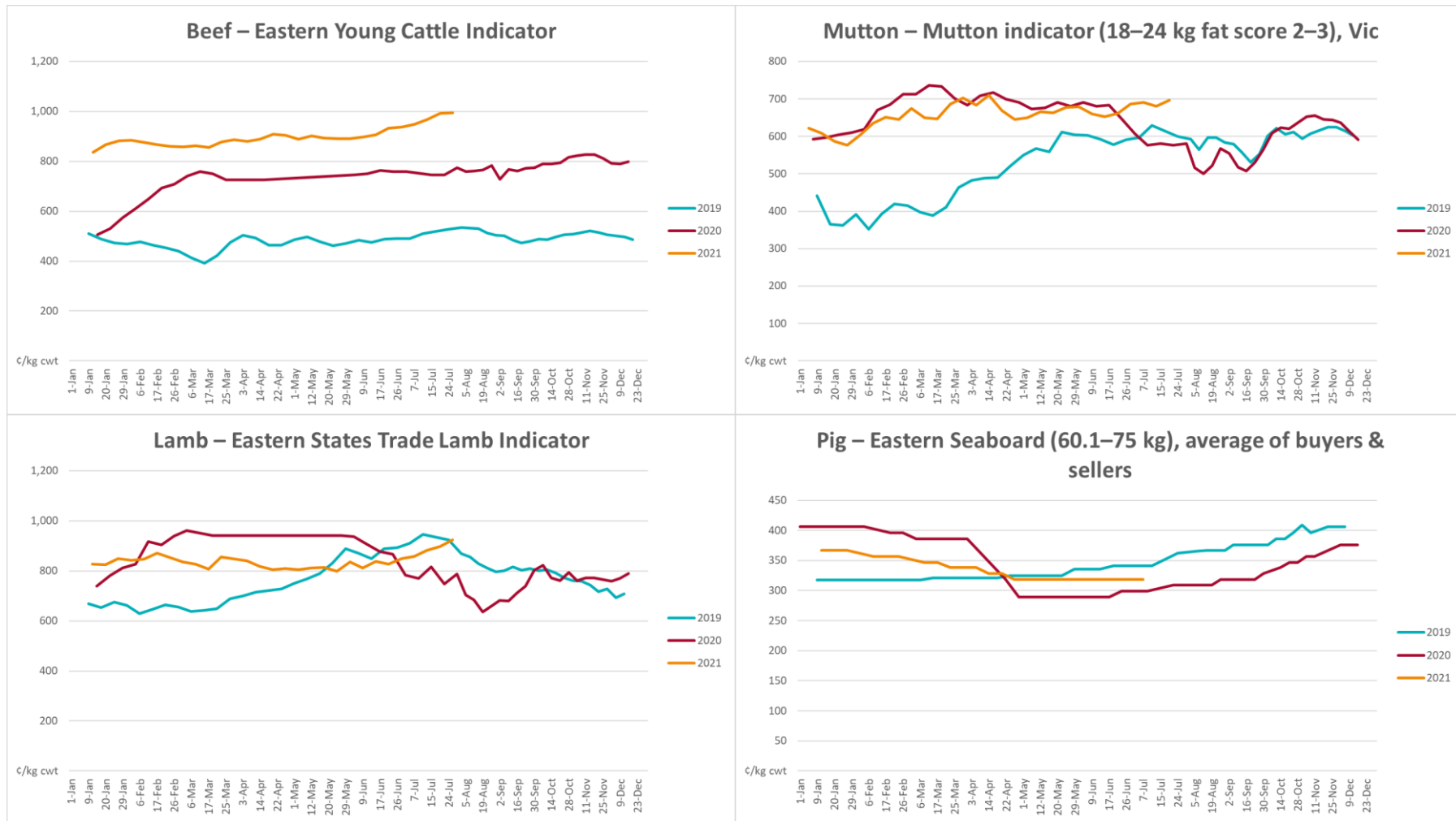


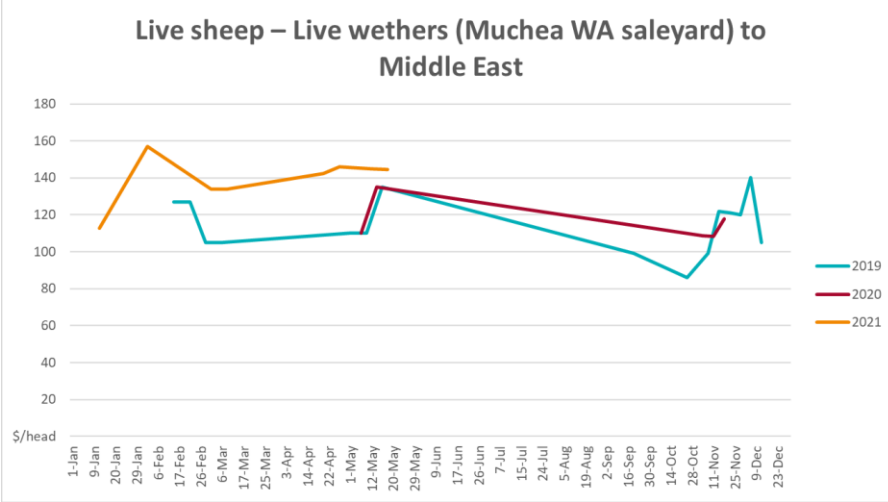
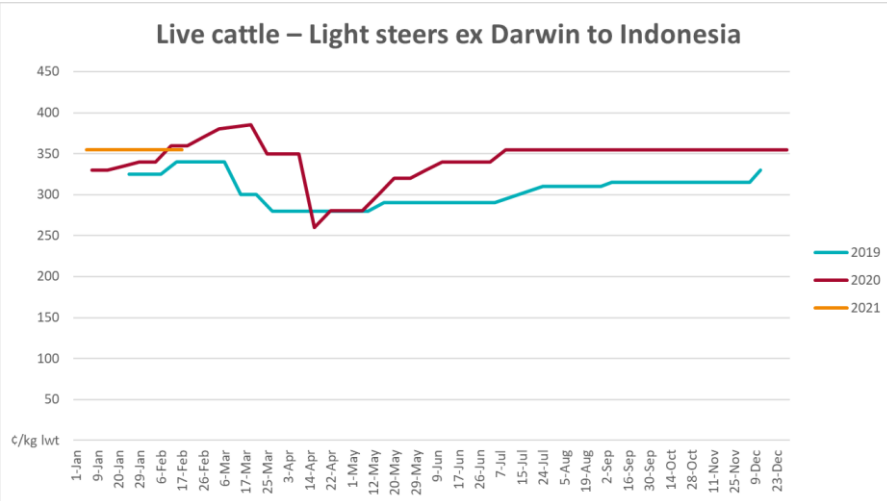
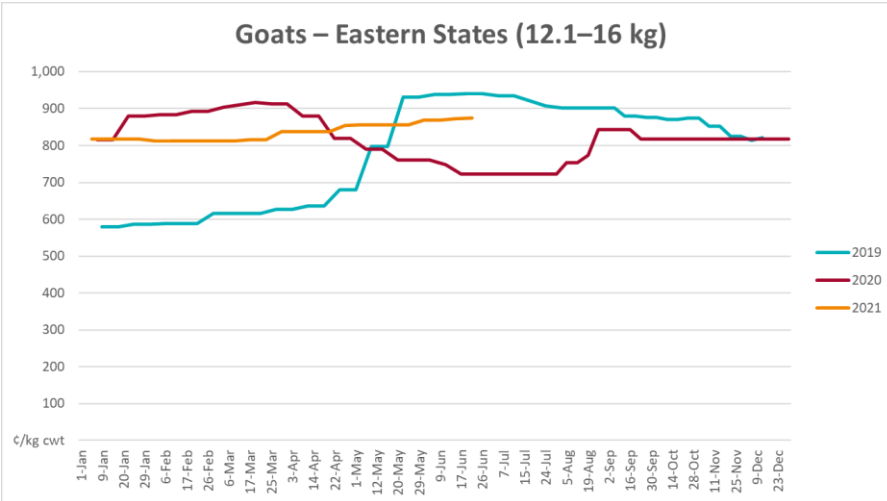
3.2. Selected domestic crop indicator prices



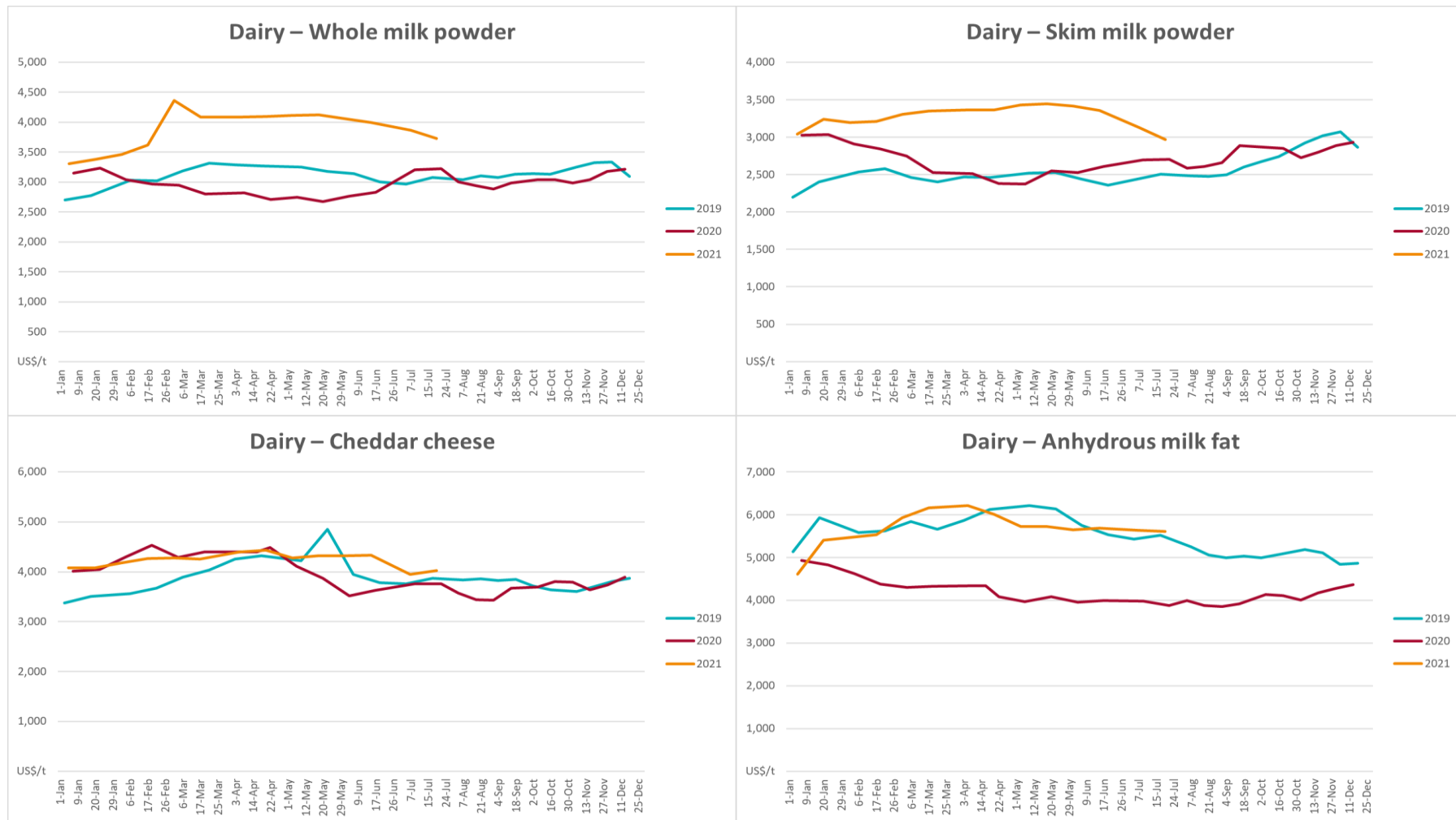


3.3. Selected domestic livestock indicator prices

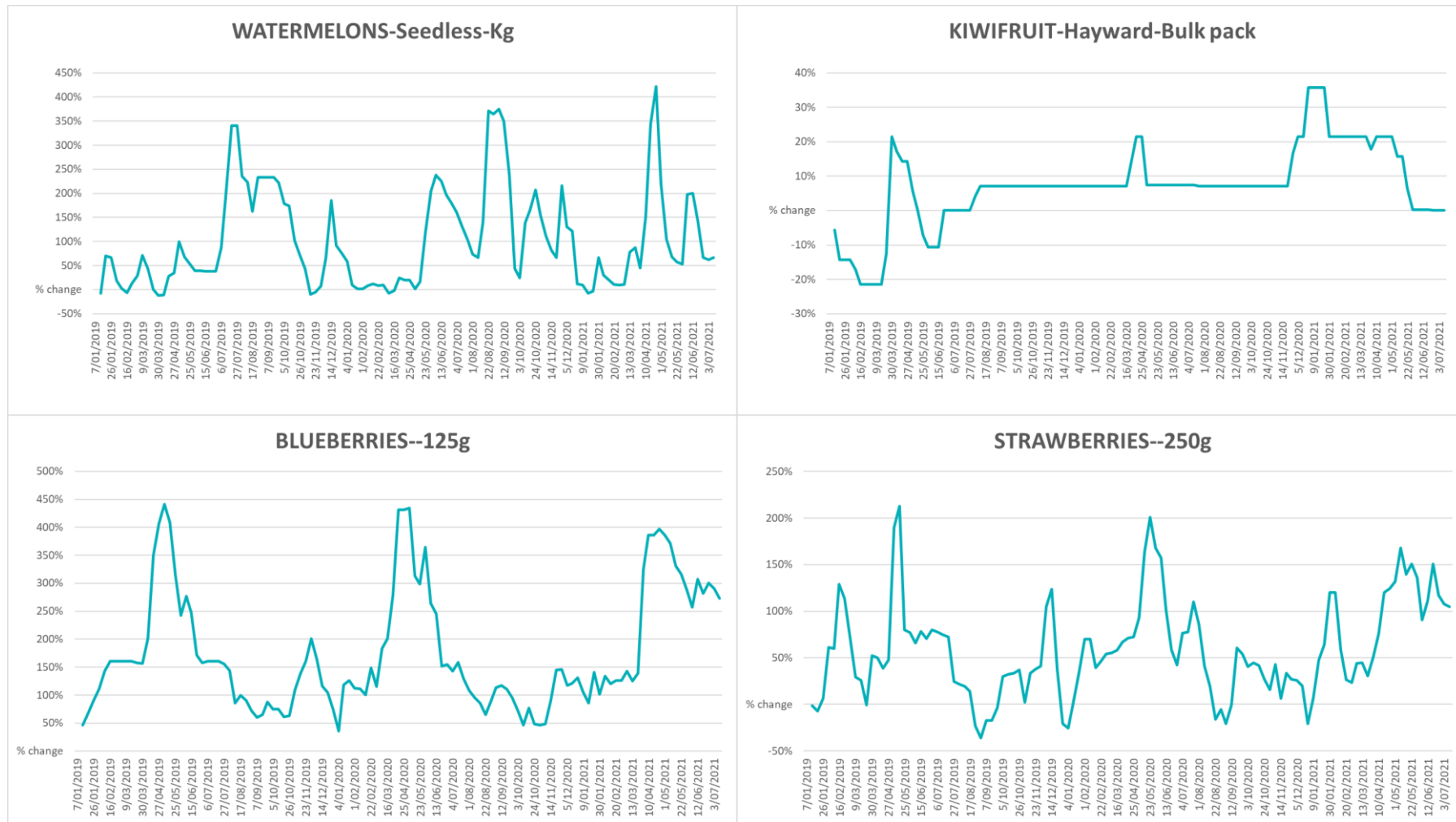




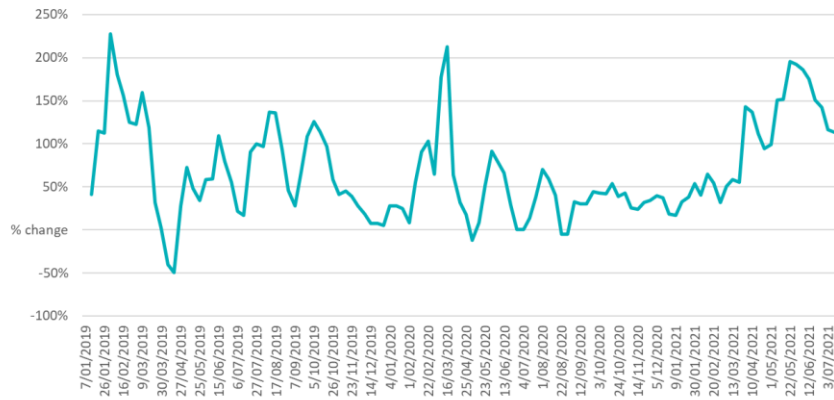
3.4. Global Dairy Trade (GDT) weighted average prices



3.5. Selected fruit and vegetable prices



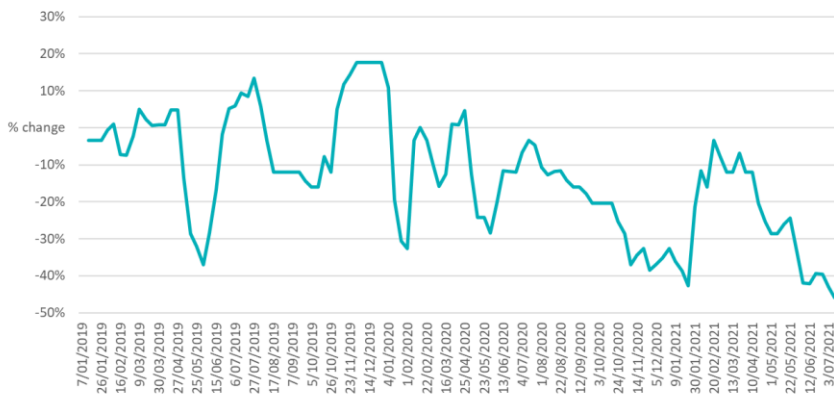
BANANAS-Cavendish-Carton



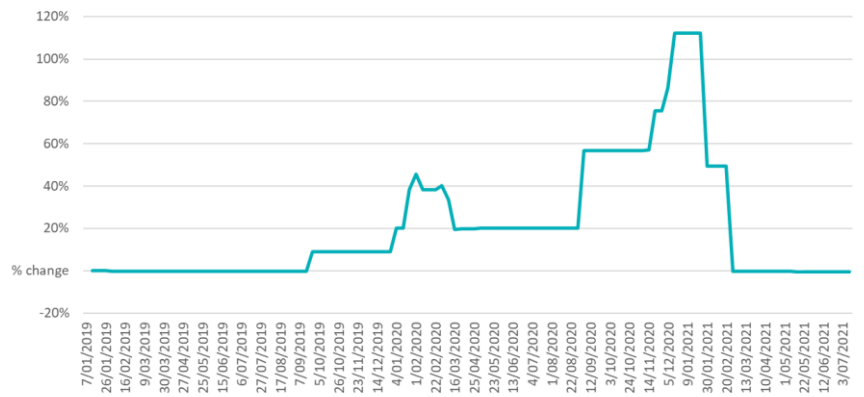
AVOCADOS-Hass-Tray



PINEAPPLES-Smoothleaf-Tray



APPLES-Royal Gala-12kg carton



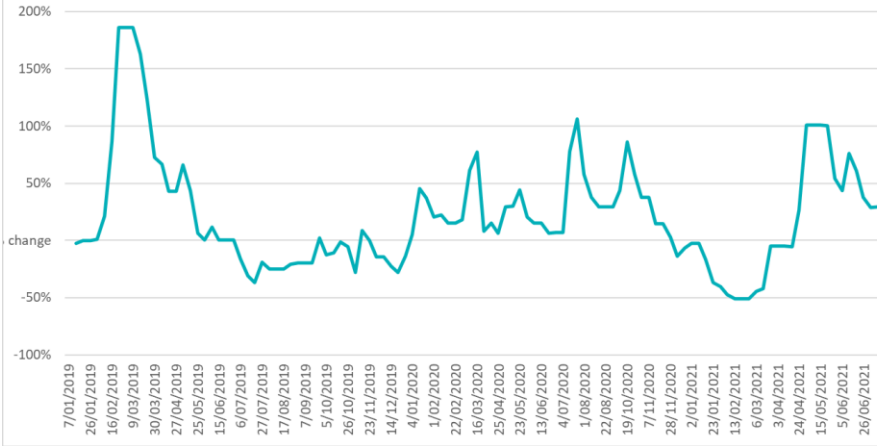
ONIONS-Brown-20Kg bag



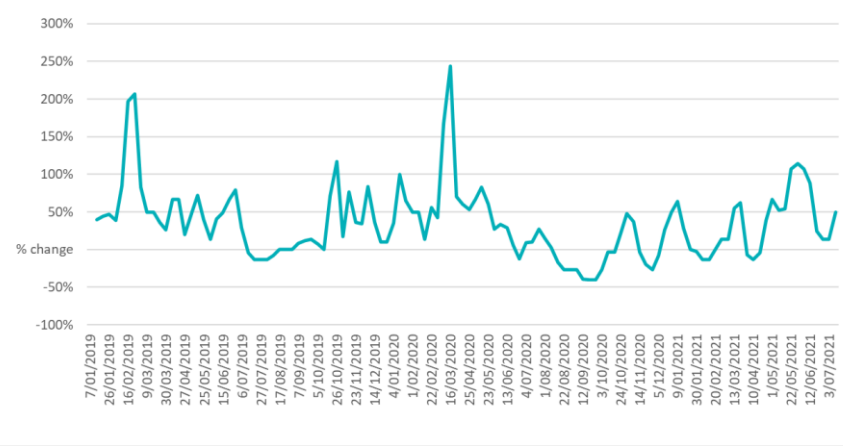
PUMPKINS-Grey Bulk-Kg



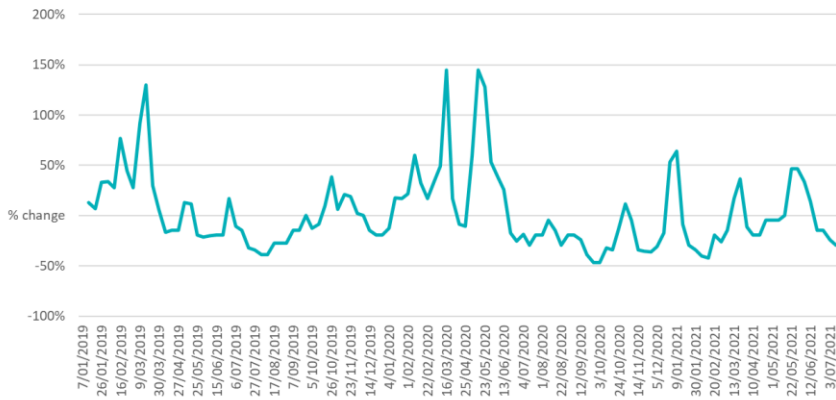
TOMATOES-Gourmet-9Kg carton



BROCCOLI-A Grade-8Kg pack



CAULIFLOWERS--Carton



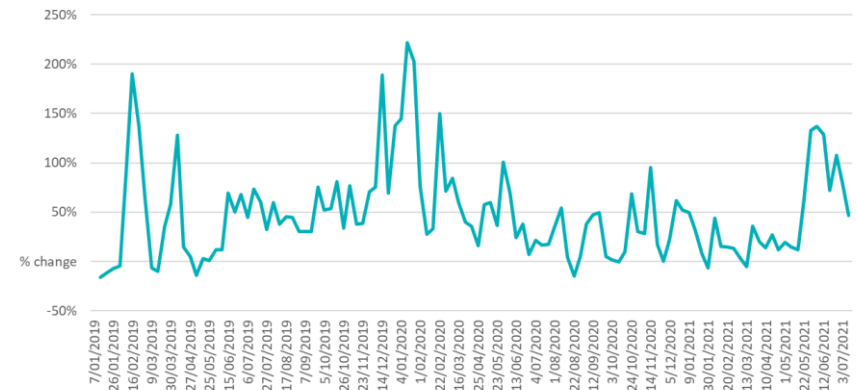
LETTUCE-Iceberg-Carton



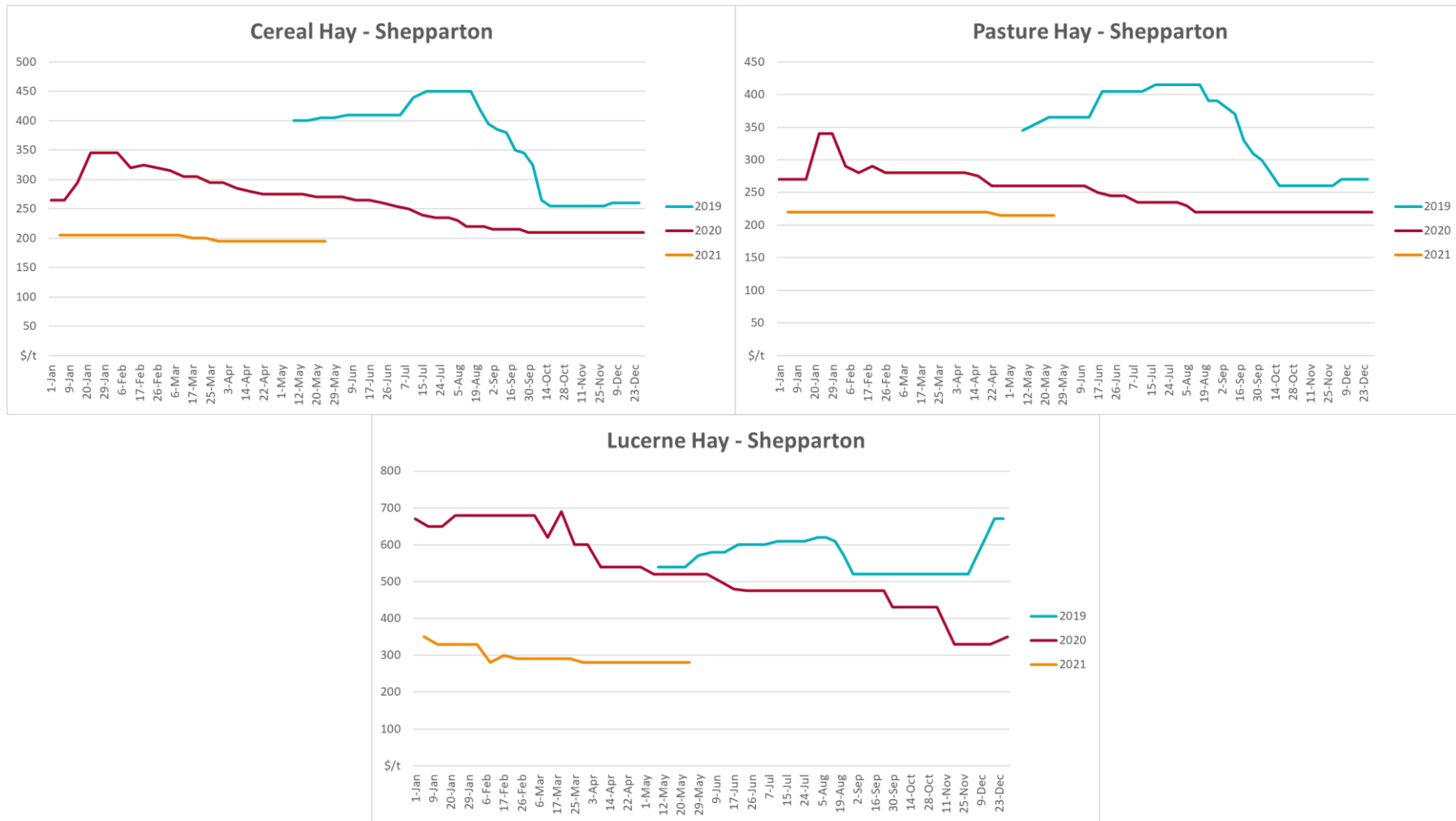
POTATOES-Brushed White-20Kg bag



BEANS-Round Stemless-Kg



3.6. Selected domestic fodder indicator prices



4. Data attribution

Climate

Bureau of Meteorology

- Weekly rainfall totals: www.bom.gov.au/climate/maps/rainfall/
- Monthly and last 3-month rainfall percentiles: www.bom.gov.au/water/landscape/
- 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/
- Climate drivers: <http://www.bom.gov.au/climate/enso/>
- Soil moisture: www.bom.gov.au/water/landscape/

Other

- Pasture growth: www.longpaddock.qld.gov.au/aussiegrass/
- 3-month global outlooks: [Environment and Climate Change Canada](#), [NOAA Climate Prediction Center](#), [EUROBRISA CPTec/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

Prices

- Waterflow: <https://www.waterflow.io/>
- Ruralco: <https://www.ruralcowater.com.au/>

Bureau of Meteorology:

- Allocation trade: <http://www.bom.gov.au/water/dashboards/#/water-markets/mbd/at>
- Storage volumes: <http://www.bom.gov.au/water/dashboards/#/water-storages/summary/drainage>

Trade constraints:

- Water NSW: <https://www.watarnsw.com.au/customer-service/ordering-trading-and-pricing/trading/murrumbidgee>
- Victorian Water Register: <https://www.waterregister.vic.gov.au/TradingRules2019/>

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, canola and fodder

- 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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This publication (and any material sourced from it) should be attributed as:

ABARES 2021, Weekly Australian Climate, Water and Agricultural Update, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, 29 July 2021. CC BY 4.0 DOI:

<https://doi.org/10.25814/5f3e04e7d2503>

ISSN 2652-7561

This publication is available at https://www.agriculture.gov.au/abares/products/weekly_update

Department of Agriculture, Water and the Environment

GPO Box 858 Canberra ACT 2601

Telephone 1800 900 090

Web awe.gov.au/abares

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Acknowledgements

This report was prepared by Cameron Van-Lane and Matthew Miller.