



Weekly Australian Climate, Water and Agricultural Update



No. 19/2021

20 May 2021

Summary of key issues

- During the week ending 19 May 2021, blocking high pressure systems resulted in little rainfall being recorded across much of Australia. However, low pressure troughs and cold fronts generated moderate rainfall across isolated parts of southern and eastern Australia ([see Section 1.1](#)).
- The rainfall across cropping regions in Queensland will likely benefit the establishment for early sown winter crops and encourage additional planting activity. Most cropping regions in Victoria and South Australia continued to receive little to no rainfall. Crop sowing has continued in this dry weather. However, rain will be needed soon in these areas to increase topsoil moisture and subsequently trigger more uniform winter crop germination and emergence.
- As at 28 April 2021 global production conditions were generally favourable. A lack of precipitation has affected the production potential of wheat, corn, rice and soy in some key grain exporters and importers ([see Section 1.2](#)).
- April production conditions are similar to those expected back in February, which were used to formulate ABARES forecasts of global grain supplies and world prices in its March 2021 edition of Agricultural commodities ([see Section 1.2](#)).
- Over the next eight days, showers are expected across isolated parts of southern and eastern Australia and high-pressure systems are expected to keep the majority of northern Australia dry.
- In Australia's cropping regions, rainfall totals of between 5 and 25 millimetres are forecast for parts of south-eastern New South Wales, southern Victoria, South Australia, and western and southern Western Australia. The falls across southern cropping regions may benefit the establishment of early sown winter crops and encourage additional planting activity ([see Section 1.3](#)).
- Water storage in the Murray–Darling Basin (MDB) increased by 205 gigalitres (GL) between 12 May 2021 and 19 May 2021. The current volume of water held in storage is 14,301 GL, which represents 57% of total capacity. This is 48% or 4,613 GL more than at the same time last year.
- Allocation prices in the Victorian Murray below the Barmah Choke increased from \$75 per ML on 12 May 2021 to \$97 per ML on 14 May 2021. Trade is open from the Murrumbidgee, with prices increasing during the week.

1. Climate

1.1. Rainfall this week

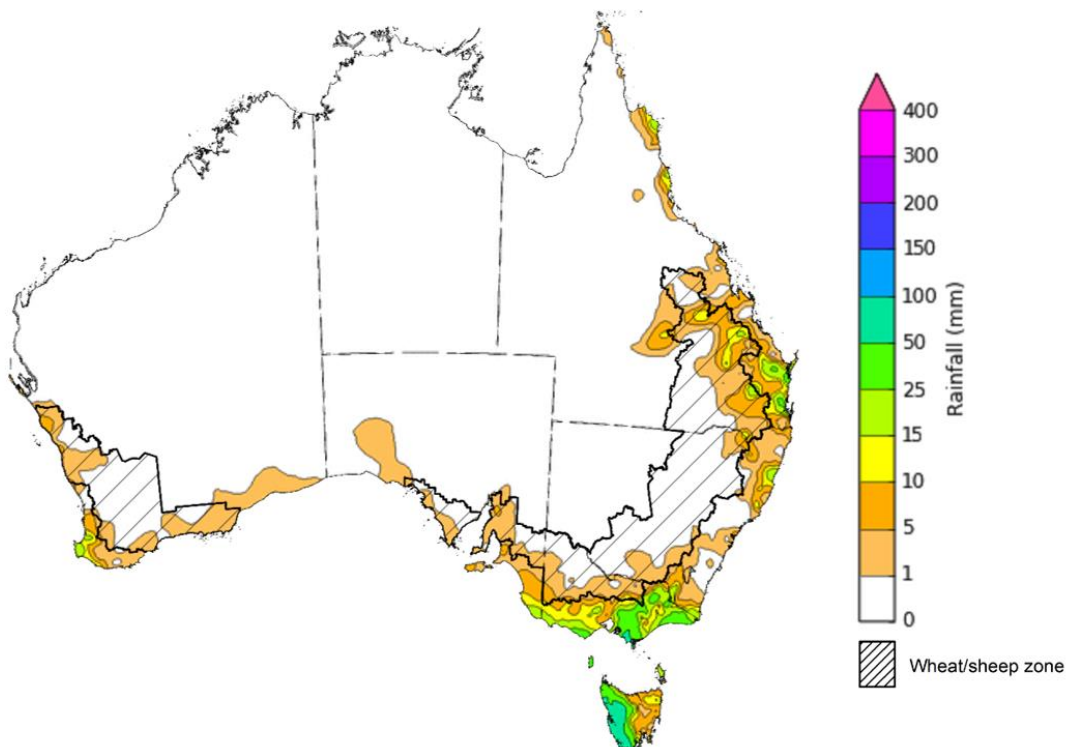
During the week ending 19 May 2021, blocking high pressure systems resulted in little rainfall being recorded across much of Australia. However, low pressure troughs and cold fronts generated moderate rainfall across isolated parts of southern and eastern Australia.

Rainfall totals of between 5 and 50 millimetres were recorded across parts of eastern New South Wales, eastern Queensland, southern Victoria, south-eastern South Australia, south-western Western Australia, and Tasmania. Rainfall totals in excess of 50 millimetres were recorded across isolated parts of southern Victoria and much of western Tasmania.

Little to no rainfall was recorded across most cropping regions during the week ending 19 May 2021. Isolated rainfall of between 5 and 25 millimetres was recorded across parts of northern and eastern Queensland.

In those parts of Queensland that recorded rainfall totals in excess of 10 millimetres, these falls will benefit the establishment for early sown winter crops and encourage additional planting activity. Most cropping regions in Victoria and South Australia continued to receive little to no rainfall. Crop sowing has continued in this dry weather, however rain will be needed soon in these areas to increase topsoil moisture and subsequently trigger more uniform winter crop germination and emergence.

Rainfall for the week ending 19 May 2021



©Commonwealth of Australia 2021, Australian Bureau of Meteorology

Issued: 19/05/2021

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. Global production conditions and climate outlook

Crop production is affected by long-term trends in average rainfall and temperature, interannual climate variability, shocks during specific growth stages, and extreme weather events ([IPCC 2012](#)). Some crops are more tolerant than others to certain types of stresses, and at each growth stage, different types of stresses affect each crop species in different ways.

The precipitation anomalies and outlooks presented here give an indication of the current and future state of production conditions for the major grain and oilseed producing countries which are responsible for over 80% of global production. This is an important input to assessing the global grain supply outlook.

April precipitation percentiles and current production conditions

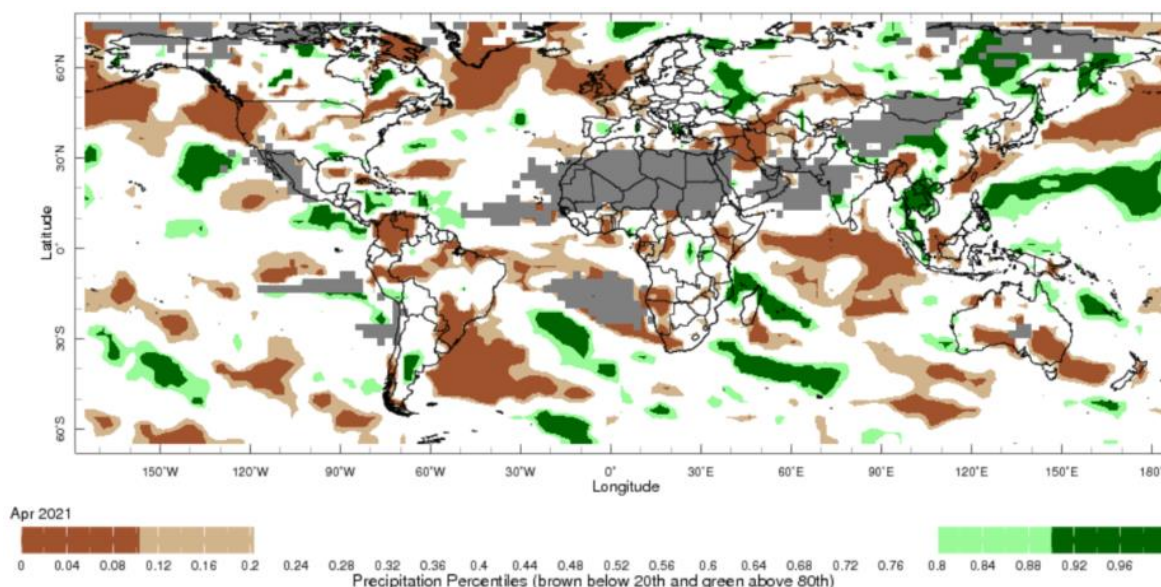
As at the end of April 2021, precipitation was average to below average for the world's major grain and oil producing regions.

In the northern hemisphere, April precipitation was above average in parts of central Canada, central China, south-western Europe, southern India, the west of the Russian Federation, northern Southeast Asia and the south-east of the United States of America.

Precipitation was below average across parts of southern Canada, south-western China, north-western and central Europe, central Indonesia, Kazakhstan, the United Kingdom, and the west and centre of the United States of America. Precipitation was generally average across the remainder of major grain and oil producing regions in the northern hemisphere.

In the southern hemisphere, April precipitation was above average across parts of southern Argentina. Precipitation was below average across parts of south-western Africa, much of southern Australia, and northern and southern Brazil. Precipitation was generally average across the remainder of major grain and oil producing regions in the southern hemisphere.

Global precipitation percentiles, April 2021



Note: The world precipitation percentiles indicate a ranking of precipitation for April, with the driest (0th percentile) being 0 on the scale and the wettest (100th percentile) being 1 on the scale. Percentiles are based on precipitation estimates from the NOAA Climate Prediction Center's [Climate Anomaly Monitoring System Outgoing Precipitation Index](#) dataset. Precipitation estimates for April 2021 are compared with rainfall recorded for that period during the 1981 to 2010 base period.

Source: International Research Institute for Climate and Society

As at 28 April 2021 global production conditions were generally favourable. However, a lack of precipitation has affected the production potential of wheat, corn, rice and soy in some key grain exporters and importers.

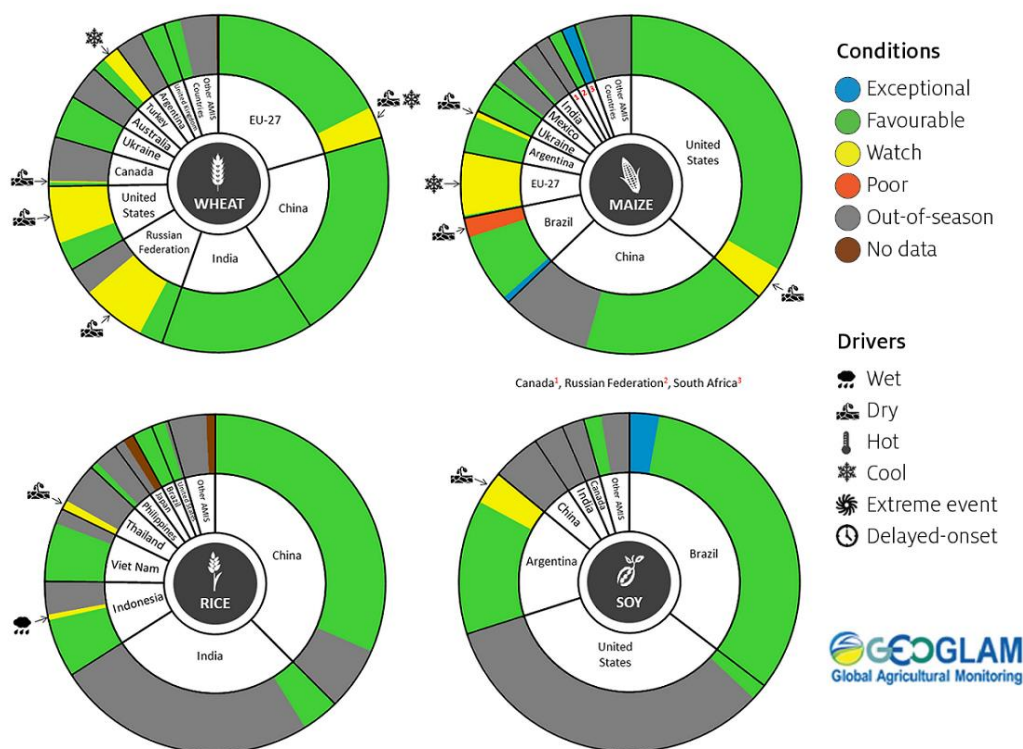
Conditions for wheat development were generally favourable in Canada, China, the European Union, India, United Kingdom and Ukraine. Variable production conditions in some areas have resulted from previous dry conditions in the Russian Federation, cold weather in Turkey and reduced rainfall in the United States.

Conditions for corn in Argentina were generally favourable as harvest continued, however uneven rainfall during the season has impacted yields. In Brazil, dryness during the season has resulted in poor conditions and reduced yields for spring-planted corn in the south. However, conditions are favourable and exceptional for the spring-planted corn in other regions of Brazil and favourable for of summer-planted corn development. Conditions for harvesting in India and for development in Mexico remained favourable, while conditions in South Africa were exceptional as harvest progressed. Conditions were favourable for sowing in China, the Russian Federation, Ukraine, and the United States of America. Cold and dry weather in the European Union resulted in the issuing of a watch status with a potential risk to average production potential, due to delaying sowing and crop development.

Conditions for rice were favourable as harvesting occurred in Brazil, the Philippines, Vietnam, India, and most of Indonesia. A lack of irrigation water followed by storm moisture damage in Thailand has resulted in a watch status for dry-season rice, pointing to a potential risk to average production potential. Conditions were favourable for sowing in China and the United States.

Conditions for soybeans in Argentina were mixed for early- and late-planted crops undergoing harvest due to a lack of rainfall during the season. In Brazil, conditions have remained favourable as harvesting wrapped up, with exceptional conditions in the north-east. Sowing began under favourable conditions for Ukraine and the southern United States.

Crop conditions, AMIS countries, 28 April 2021



AMIS Agricultural Market Information System.
Source: AMIS

Rainfall outlook and potential impact on the future state of production conditions between June and August 2021

Region	June-August rainfall outlook	Potential impact on production
Argentina	Below average rainfall is more likely across most of Argentina between June and August 2021.	Below average rainfall across most of Argentina may adversely affect the planting and development of wheat. In contrast it may allow for uninterrupted harvest of cotton, corn, sorghum, rice, millet and soybeans in June.
Black Sea Region	Ukraine - Average rainfall is more likely across most of Ukraine. Kazakhstan - Average rainfall is more likely across most of Kazakhstan. The Russian Federation – Average rainfall is more likely across most of Russia and above average rainfall is more likely across parts of eastern Russia.	Average or better rainfall across the Black Sea Region is likely to support the development of spring wheat in the north and the development of winter wheat, canola, cotton, corn and sunflower in the south.
Brazil	Above average rainfall is more likely across parts of northern Brazil and below average rainfall is more likely across parts of southern Brazil between June and August 2021.	Below average rainfall between June and August 2021 across southern Brazil may adversely affect the planting and development of wheat. Conversely, average rainfall across parts of central-west Brazil may benefit corn and cotton prior to harvest in June.
Canada	Average rainfall is more likely for much of Canada, with below average rainfall more likely for parts of south-western Canada between June and August 2021.	Average rainfall is likely to support the development of spring wheat and canola, and the planting and development of corn, soybeans and sunflower. Below average rainfall in parts of the south-west may adversely impact the development of these crops. In contrast, below average rainfall may allow for uninterrupted harvest of winter wheat in June.
China	Above average rainfall is more likely across parts of northern and south-western China and below average rainfall is more likely across parts of north-western China between June and August 2021.	Average or better rainfall across much of eastern China is likely to support the development of spring wheat, rice, cotton, corn, sorghum, soybeans, sunflower and nuts. This rainfall may also benefit the development of winter wheat and canola prior to harvest in June and July, or it may delay harvesting.
Europe	Below average rainfall more likely for parts of south-western and eastern Europe between June and August 2021.	Below average rainfall across parts of Europe may adversely affect the development of winter wheat, canola, corn, cotton, soybeans, sorghum and sunflower. In contrast, close to average rainfall across the remainder of Europe may benefit these crops previously mentioned and average rainfall in northern Europe is likely to benefit the development of spring wheat in Sweden.
South Asia (India)	Above average rainfall is more likely across much of India and below average rainfall is more likely across isolated parts of the north-eastern India between June and August 2021.	Above average rainfall across much of India is likely to benefit the planting and development of cotton, corn, sorghum, rice, millet, nuts and sunflower from June 2021.
Southeast Asia (SEA)	Above average rainfall is more likely for parts of southern Southeast Asian countries and below average rainfall is more likely for parts of Myanmar and northern Vietnam between June and August 2021.	Average or better rainfall across most of Southeast Asia is likely to benefit corn and rice planting and development. Below average rainfall across parts of Myanmar and northern Vietnam may adversely impact rice and corn production.
The United States of America	Above average rainfall is more likely for parts of eastern US and isolated parts of the south-west and below average rainfall is more likely for parts of the north-west between June and August 2021.	Average or better rainfall across much of the eastern and southern US is likely to support the development of winter wheat, spring wheat, canola, cotton and rice, corn, sorghum and nuts and the planting and development of soybeans, sunflower and millet. Below average rainfall in the north-western US may adversely impact the development of these crops and pastures.

1.3. Rainfall forecast for the next eight days

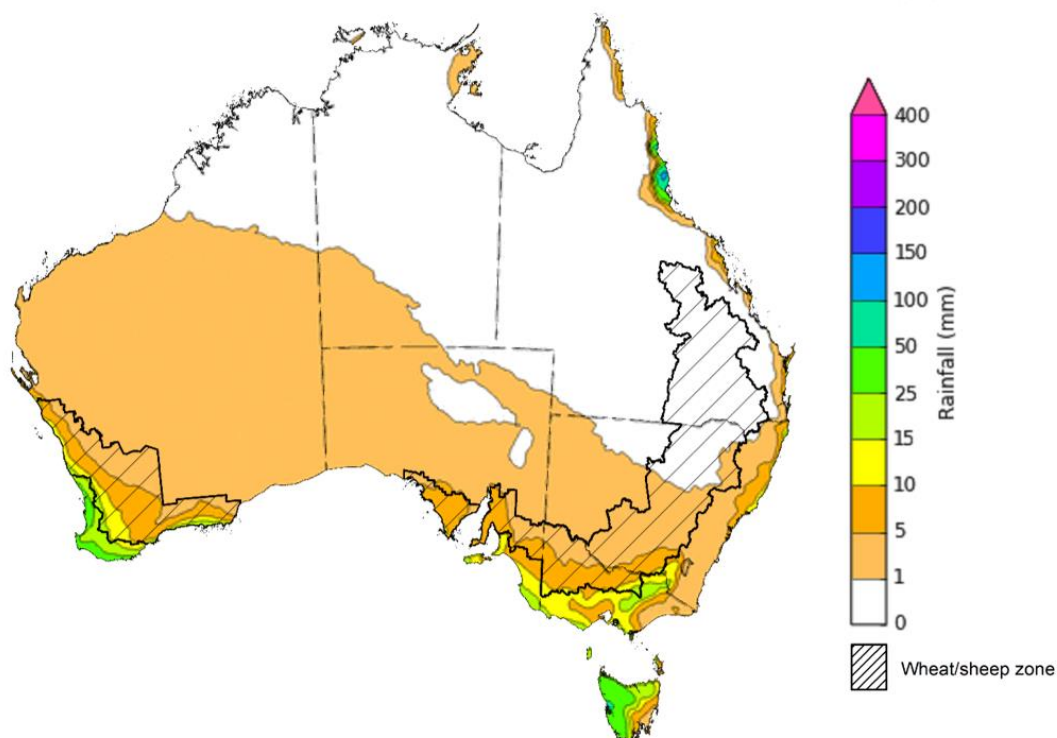
Low-pressure systems are likely to bring isolated showers to parts of southern Australia, while onshore flow is expected to bring falls to parts of the east coast during the 8 days to 27 May 2021. High-pressure systems are expected to keep the majority of northern Australia dry during the next 8 days.

Rainfall totals of between 5 and 50 millimetres are forecast for parts of eastern and southern New South Wales, Victoria, south-eastern South Australia, south-western of Western Australia, Tasmania and parts of north-eastern Queensland. Rainfall totals in excess of 50 millimetres are forecast for isolated parts of north-eastern Queensland and western Tasmania.

In Australia's cropping regions, rainfall totals of between 5 and 25 millimetres are forecast for the far south of New South Wales, southern Victoria, South Australia and western and southern Western Australia. Little to no rainfall is expected across cropping regions in Queensland and most cropping regions in New South Wales, northern Victoria and eastern Western Australia.

The falls across southern cropping regions may benefit the establishment for early sown winter crops and encourage addition planting activity. The dry forecast for the next 8 days across Queensland and most of New South Wales will maintain near ideal conditions for wheat, barley, and canola planting and early development where soil moisture is adequate to support growth, and continued summer crop harvesting.

Total forecast rainfall (mm) for the period 20 May to 27 May 2021



©Commonwealth of Australia 2021, Australian Bureau of Meteorology

Issued: 20/05/2021

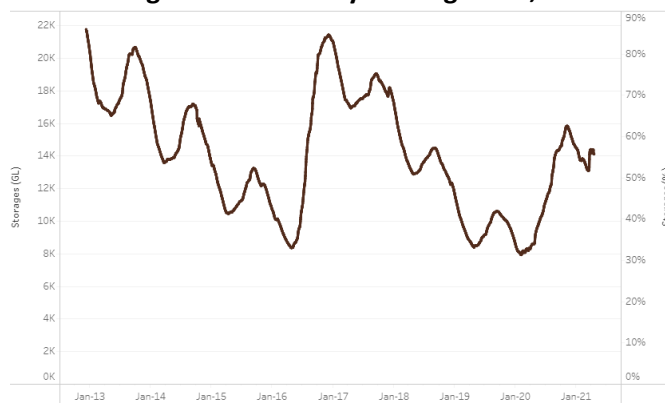
Note: This rainfall forecast is produced from computer models. As the model outputs are not altered by weather forecasters, it is important to check local forecasts and warnings issued by the Bureau of Meteorology.

2. Water

2.1. Water markets – current week

Water storage in the Murray–Darling Basin (MDB) increased by 205 gigalitres (GL) between 12 May 2021 and 19 May 2021. The current volume of water held in storage is 14,301 GL, which represents 57% of total capacity. This is 48% or 4,613 GL more than at the same time last year.

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

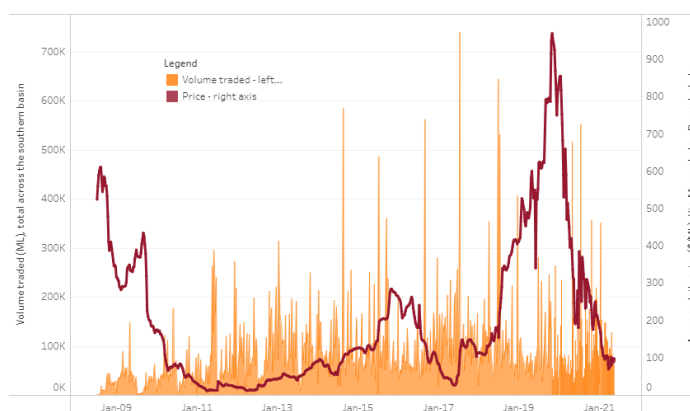


Water storage data is sourced from the Bureau of Meteorology.

Allocation prices in the Victorian Murray below the Barmah Choke increased from \$75 per ML on 12 May 2021 to \$97 per ML on 14 May 2021. Trade is open from the Murrumbidgee, with prices increasing during the week.

Region	\$/ML
NSW Murray Above	99
NSW Murrumbidgee	82
VIC Goulburn-Broken	84
VIC Murray Below	97

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 20 May 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-200521

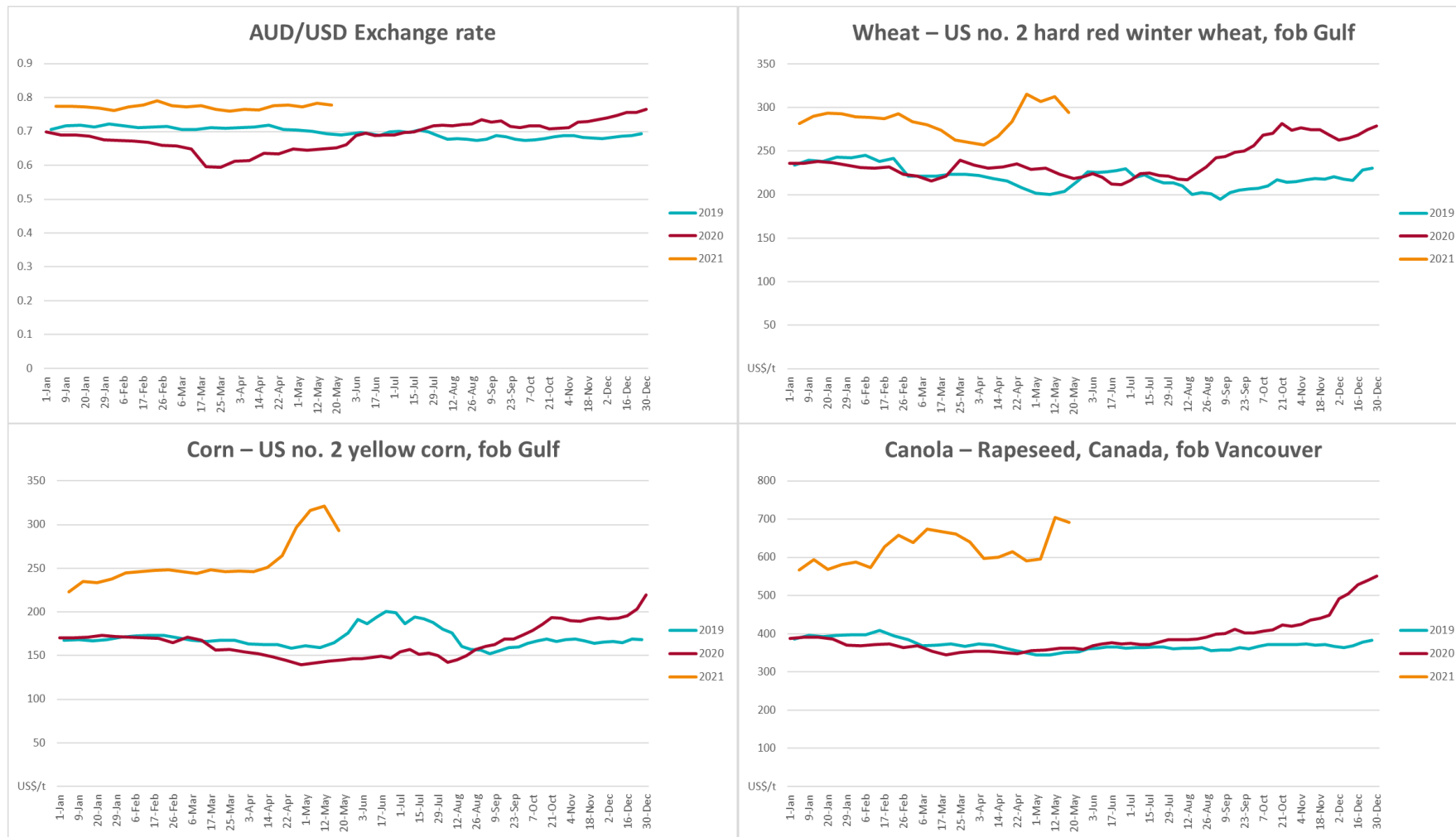
3. Commodities

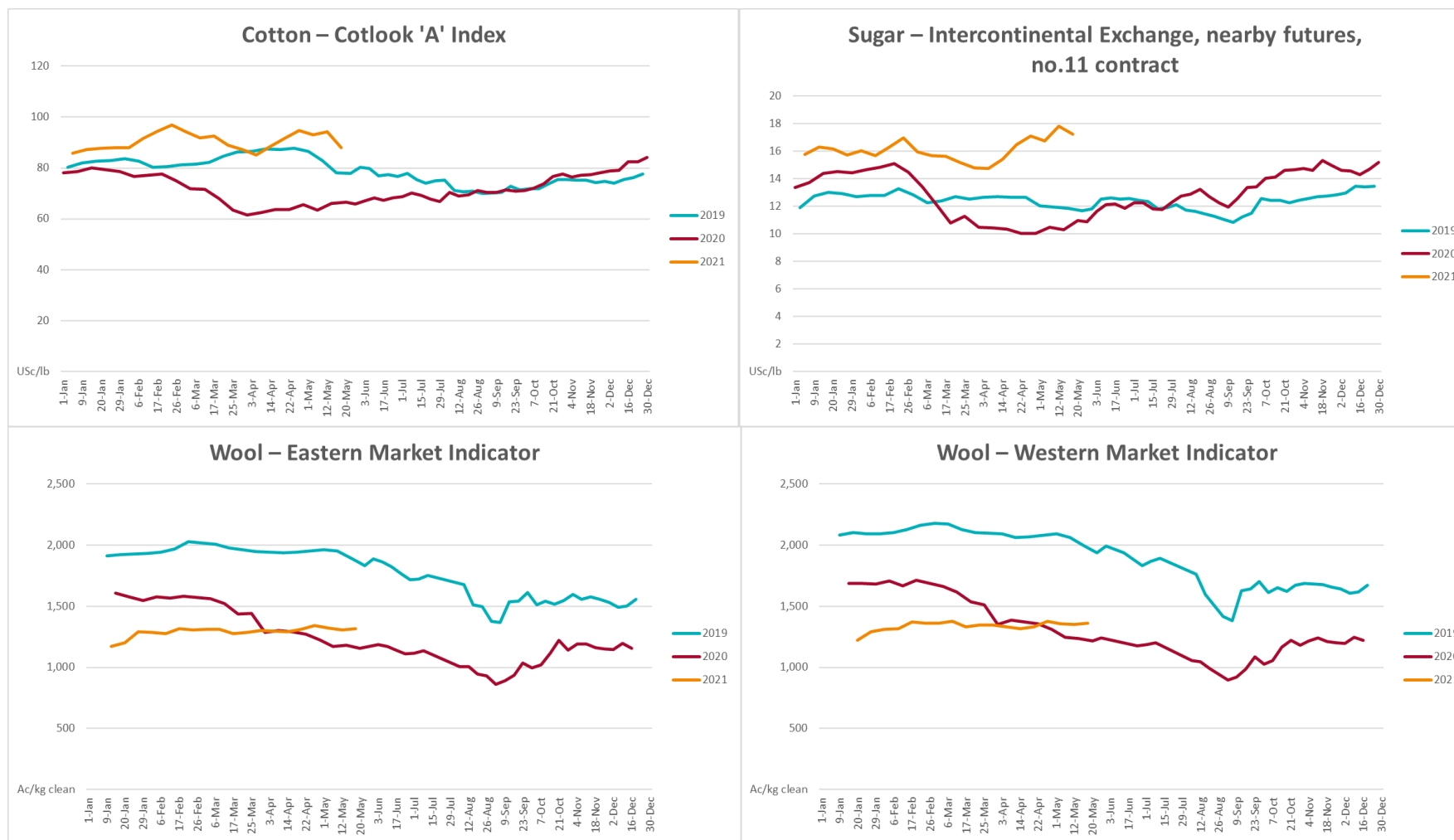
Indicator	Week ended	Unit	Latest price	Previous week	Weekly change	Price 12 months ago	Annual change
Selected world indicator prices							
AUD/USD Exchange rate	19-May	A\$/US\$	0.78	0.78	-1%	0.66	18%
Wheat – US no. 2 hard red winter wheat, fob Gulf	19-May	US\$/t	294	313	-6%	221	33%
Corn – US no. 2 yellow corn, fob Gulf	19-May	US\$/t	293	321	-9%	146	100%
Canola – Rapeseed, Canada, fob Vancouver	19-May	US\$/t	692	705	-2%	360	92%
Cotton – Cotlook 'A' Index	19-May	USc/lb	88	94	-7%	66	34%
Sugar – Intercontinental Exchange, nearby futures, no.11 contract	19-May	USc/lb	17	18	-3%	11	58%
Wool – Eastern Market Indicator	19-May	Ac/kg clean	1,315	1,306	1%	1,301	1%
Wool – Western Market Indicator	19-May	Ac/kg clean	1,361	1,350	1%	1,662	-18%
Selected Australian grain export prices							
Milling Wheat – APW, Port Adelaide, SA	19-May	A\$/t	372	383	-3%	397	-6%
Feed Wheat – ASW, Port Adelaide, SA	19-May	A\$/t	368	381	-3%	396	-7%
Feed Barley – Port Adelaide, SA	19-May	A\$/t	300	316	-5%	287	4%
Canola – Kwinana, WA	19-May	A\$/t	741	756	-2%	639	16%
Grain Sorghum – Brisbane, QLD	19-May	A\$/t	368	370	-1%	426	-14%
Selected domestic livestock indicator prices							
Beef – Eastern Young Cattle Indicator	19-May	Ac/kg cwt	896	899	0%	742	21%
Mutton – Mutton indicator (18–24 kg fat score 2–3), Vic	19-May	Ac/kg cwt	654	658	-1%	676	-3%
Lamb – Eastern States Trade Lamb Indicator	19-May	Ac/kg cwt	811	813	0%	941	-14%
Pig – Eastern Seaboard (60.1–75 kg), average of buyers & sellers	19-May	Ac/kg cwt	349	353	-1%	406	-14%
Goats – Eastern States (12.1–16 kg)	19-May	Ac/kg cwt	857	857	0%	790	8%
Live cattle – Light steers ex Darwin to Indonesia	17-Feb	Ac/kg lwt	355	355	0%	360	-1%
Live sheep – Live wethers (Mucnea WA saleyard) to Middle East	12-May	\$/head	145	146	-1%	#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	19-May	US\$/t	4,123	4,115	0%	3,287	25%
Dairy – Skim milk powder	19-May	US\$/t	3,447	3,433	0%	2,468	40%
Dairy – Cheddar cheese	19-May	US\$/t	4,321	4,274	1%	4,319	0%
Dairy – Anhydrous milk fat	19-May	US\$/t	5,730	5,730	0%	6,126	-6%

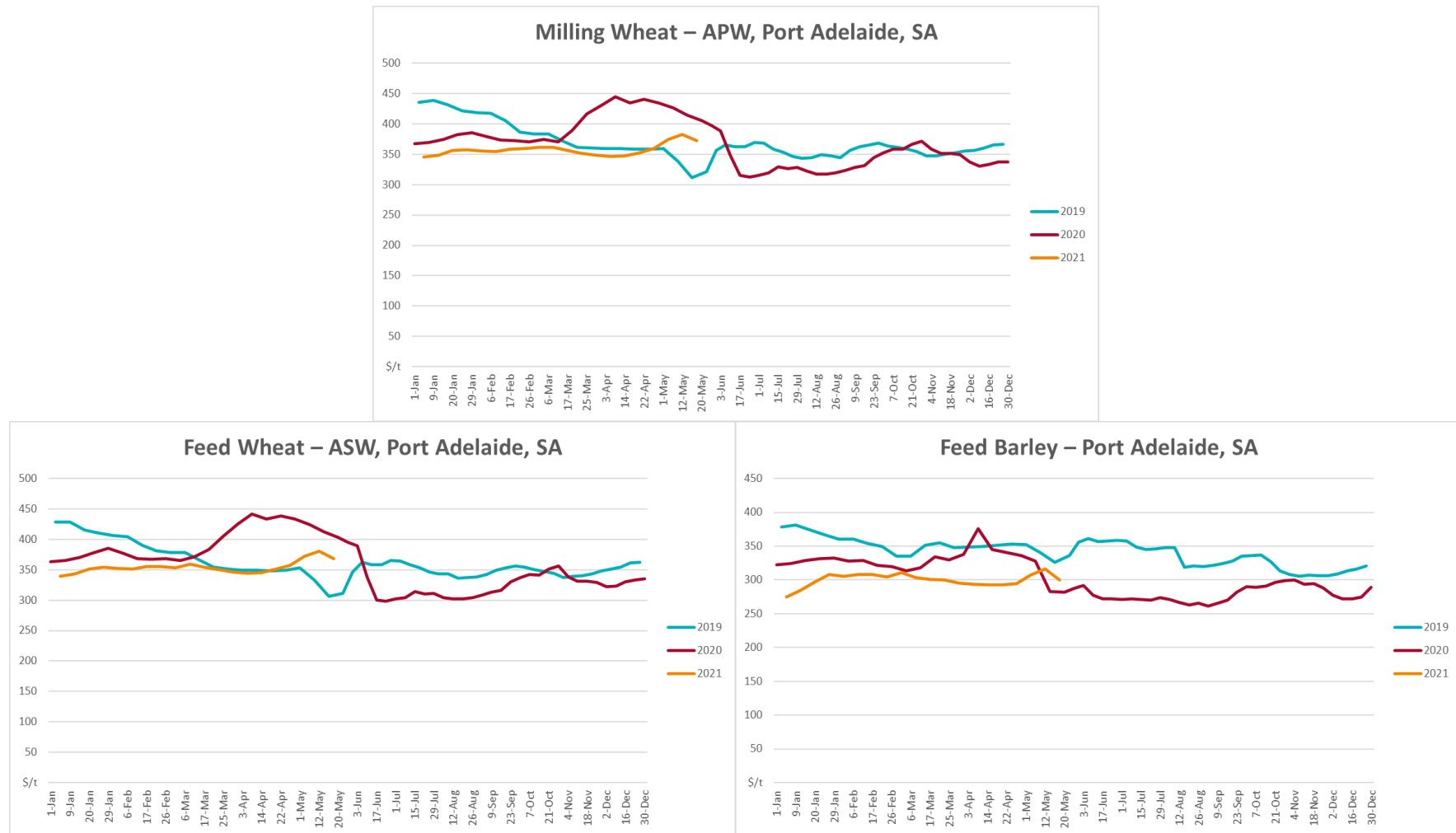
a Global Dairy Trade prices are updated twice monthly on the first and third Tuesday of each month.

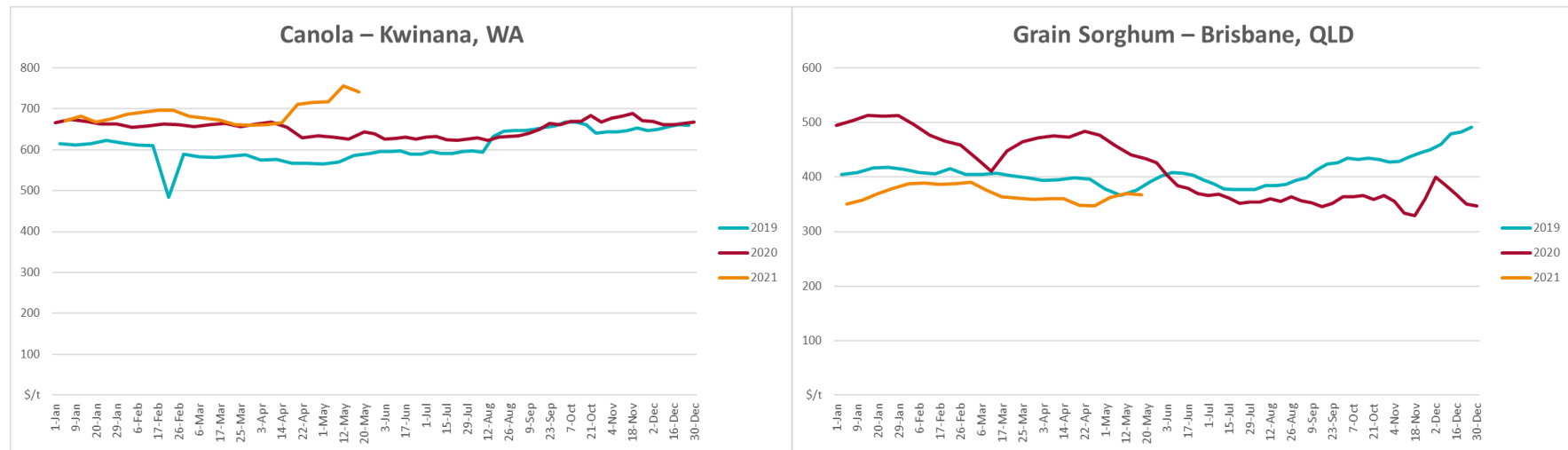
3.1. Selected world indicator prices



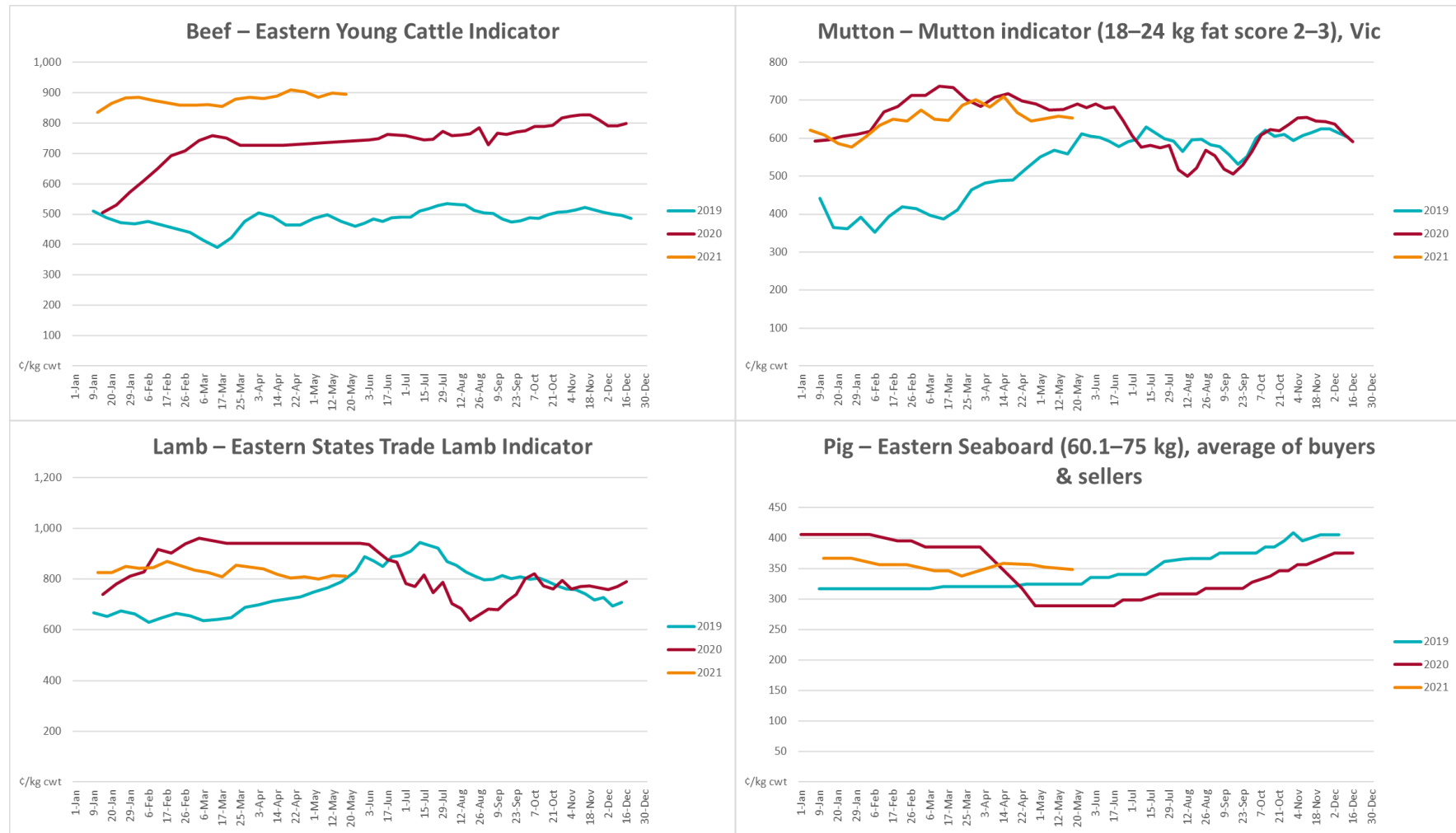


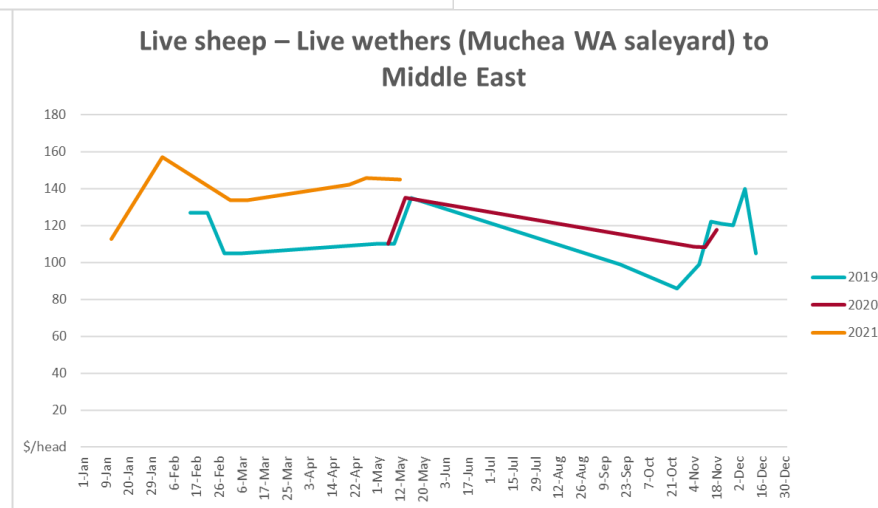
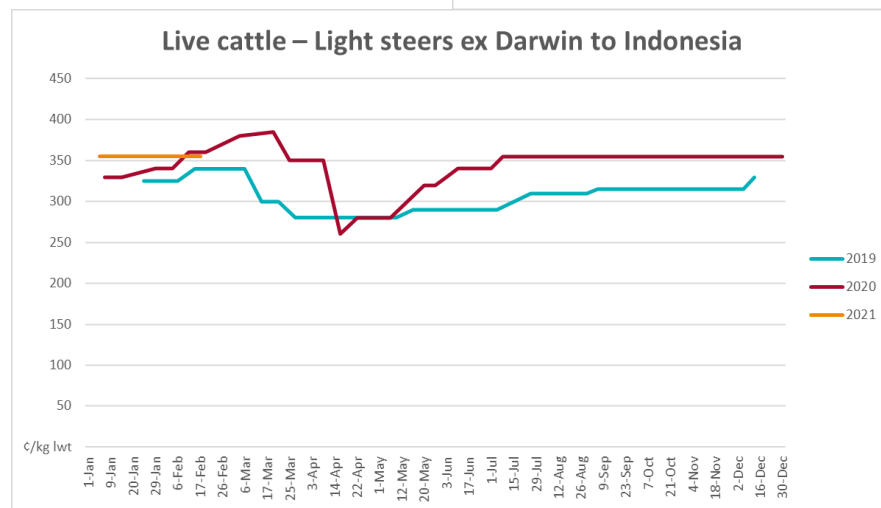
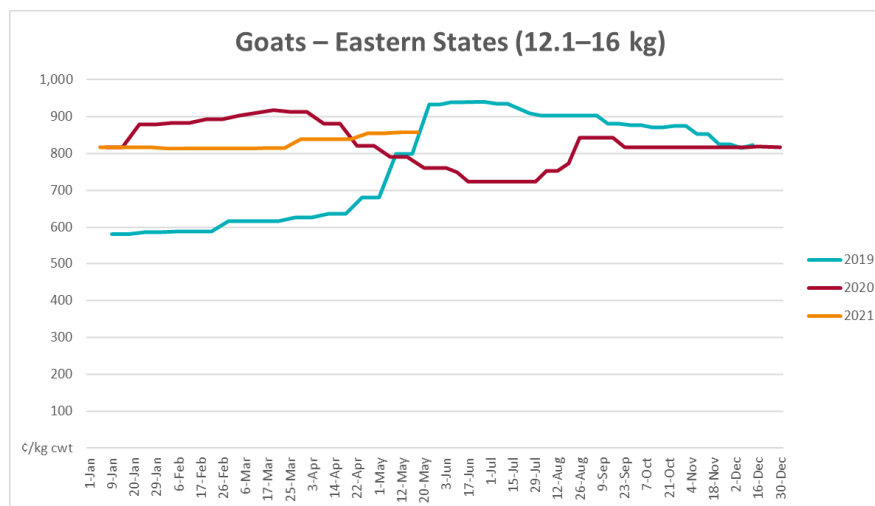
3.2. Selected domestic crop indicator prices



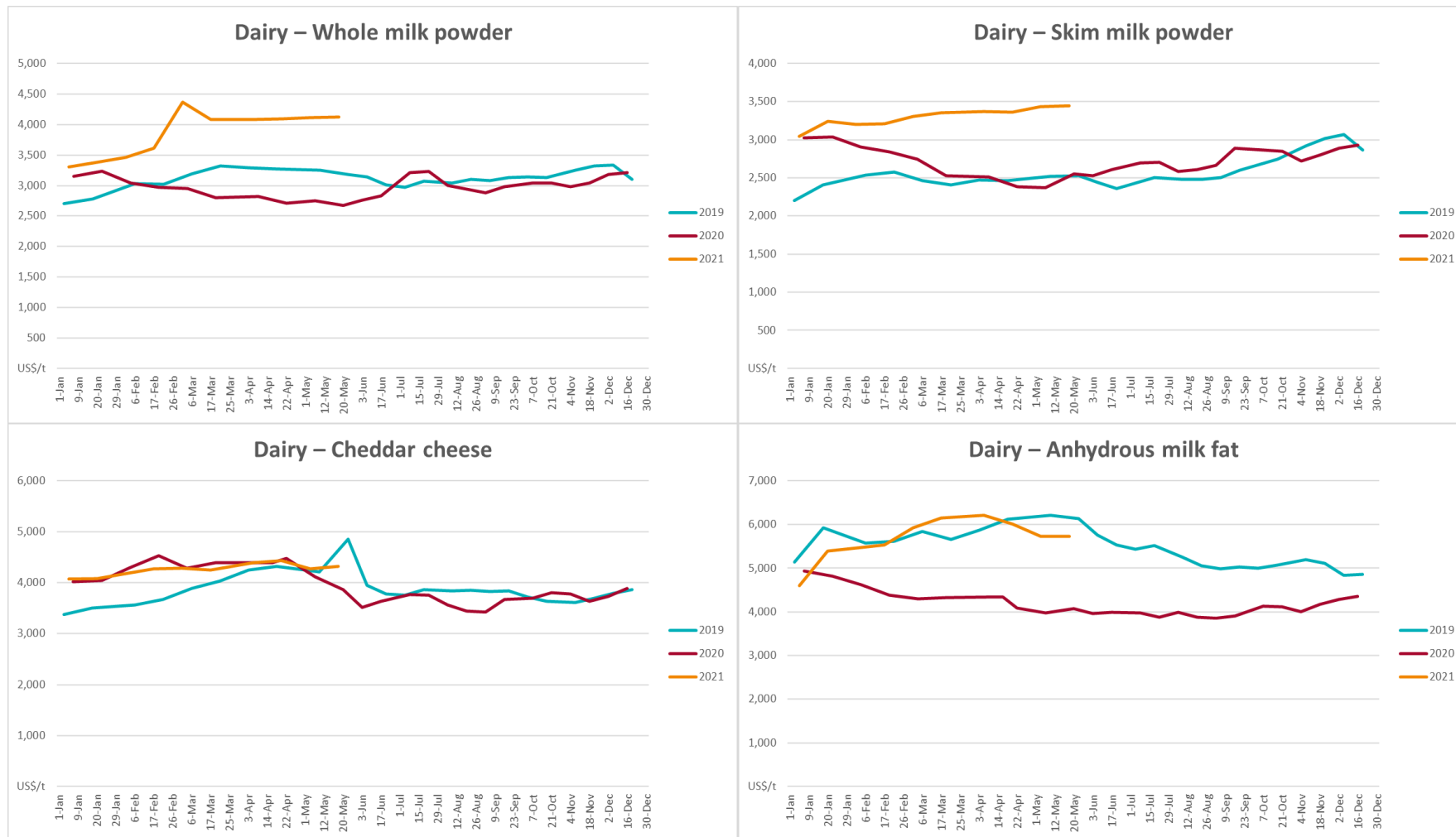


3.3. Selected domestic livestock indicator prices

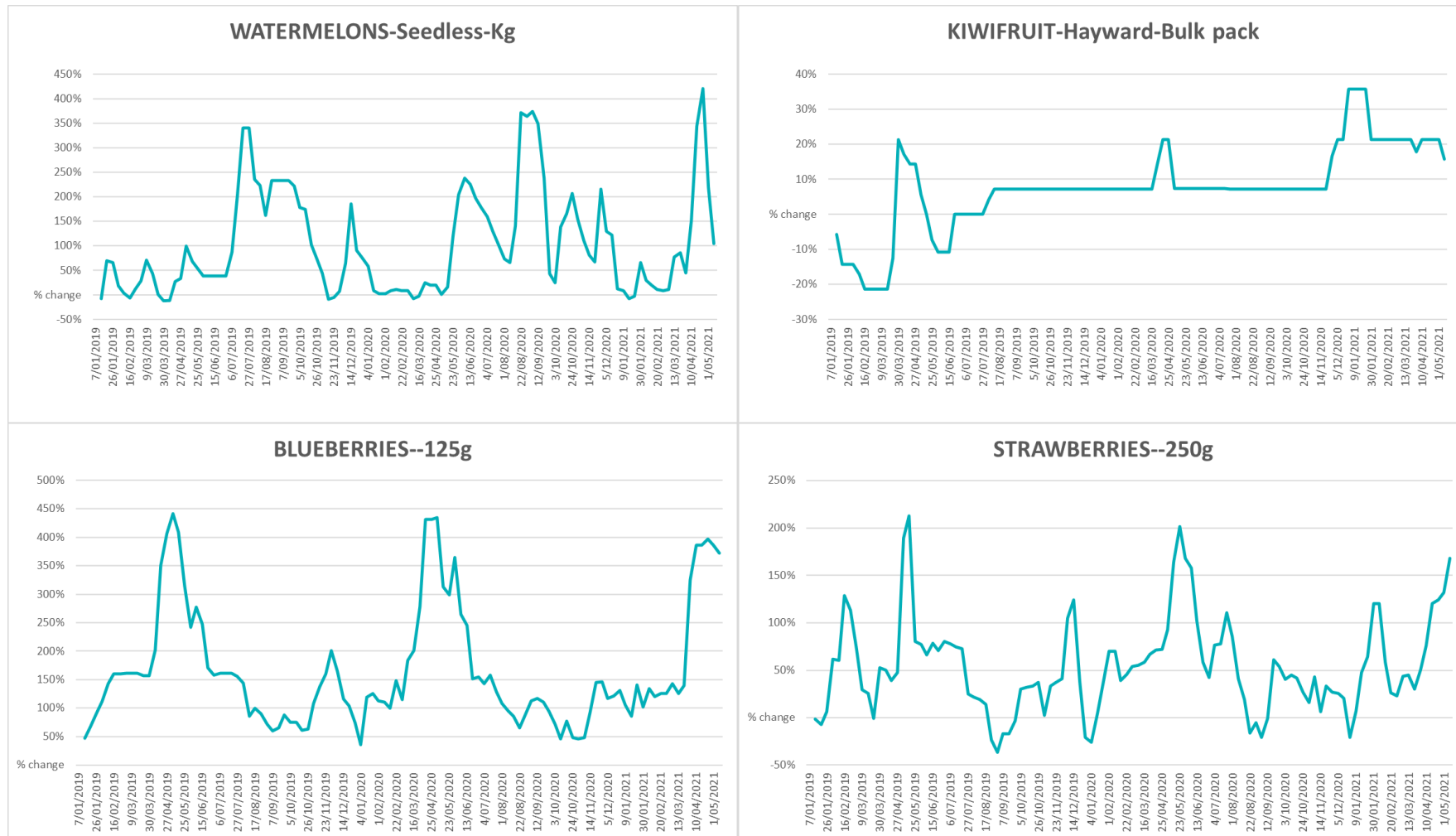


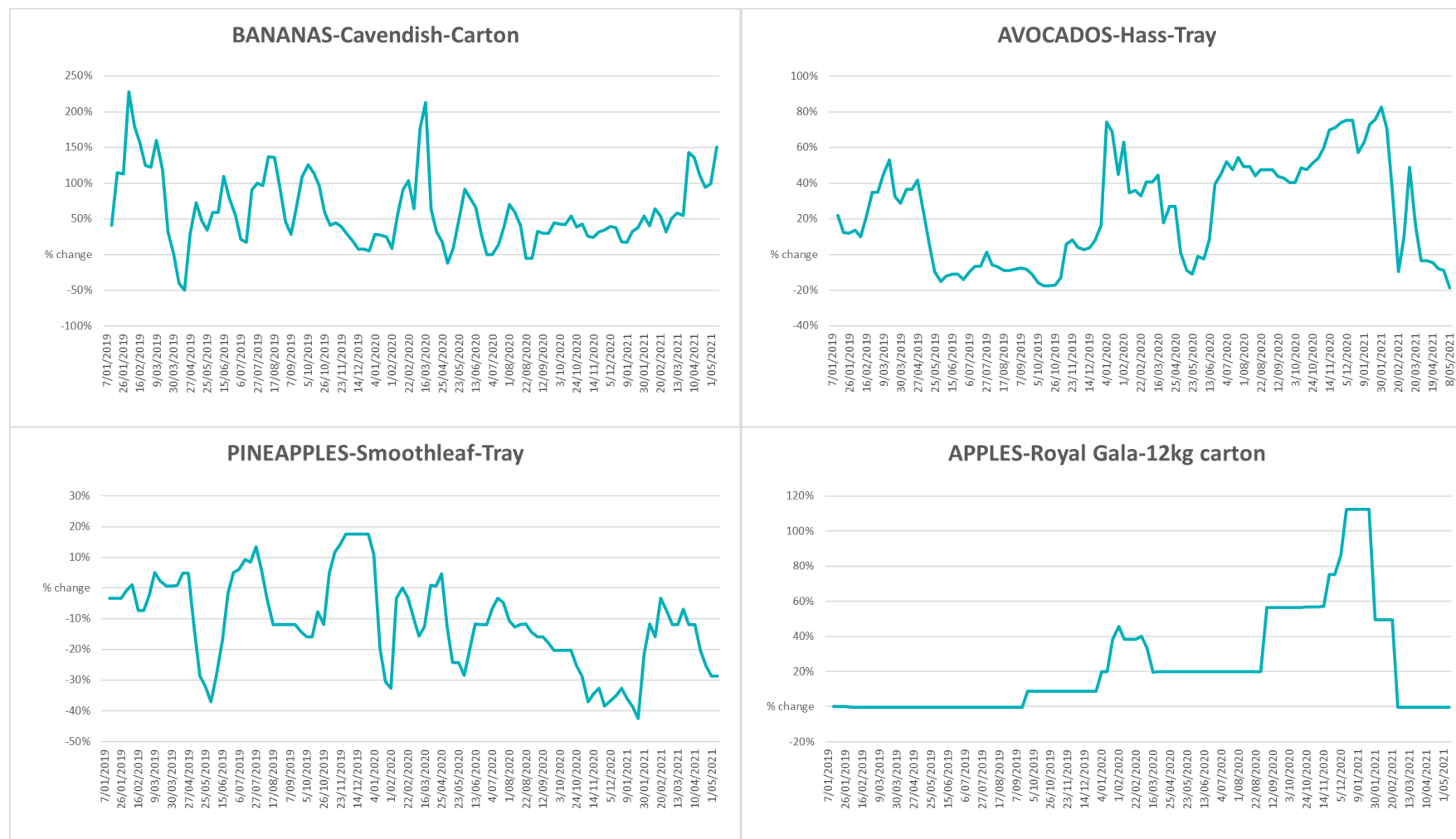


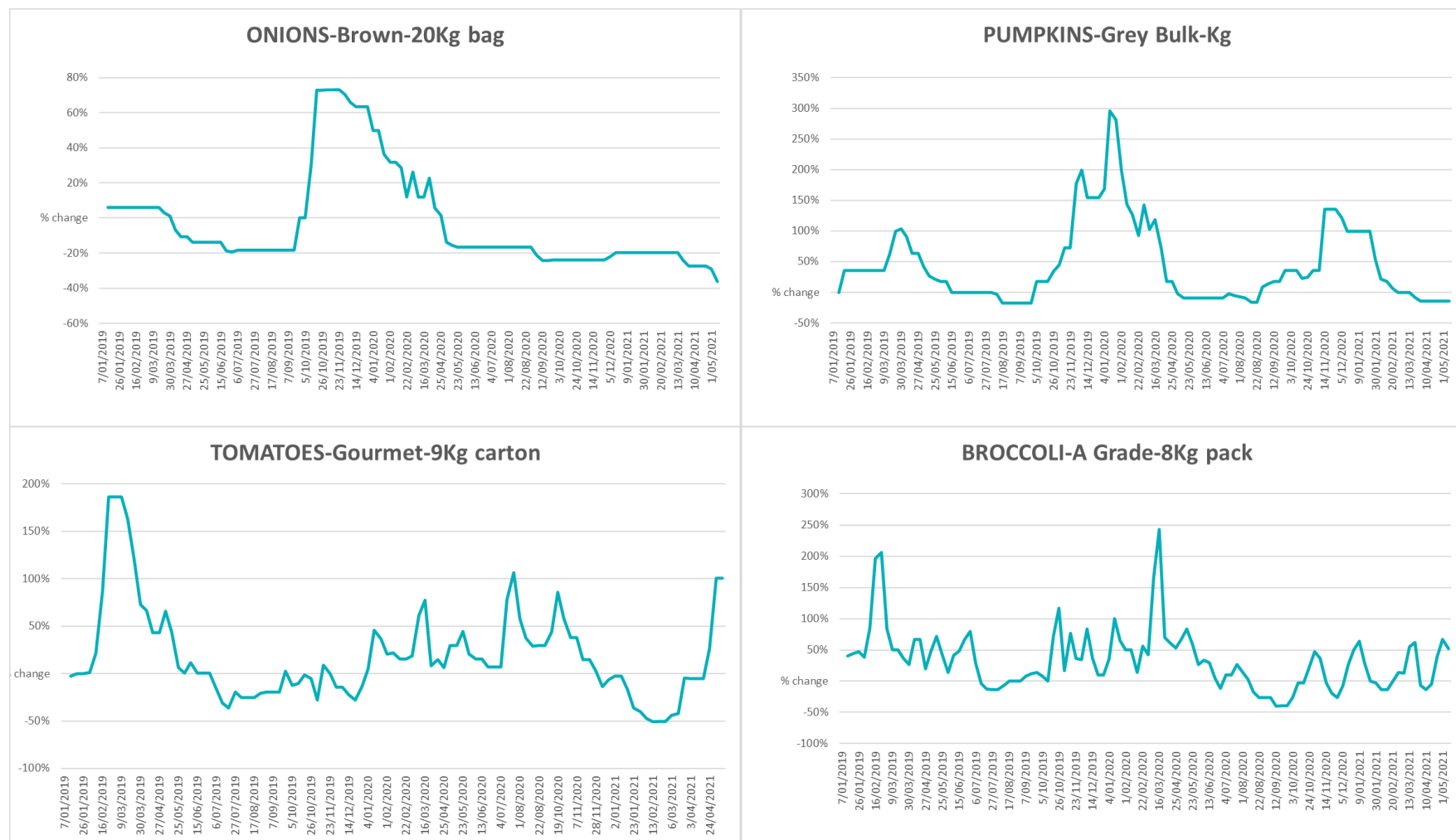
3.4. Global Dairy Trade (GDT) weighted average prices

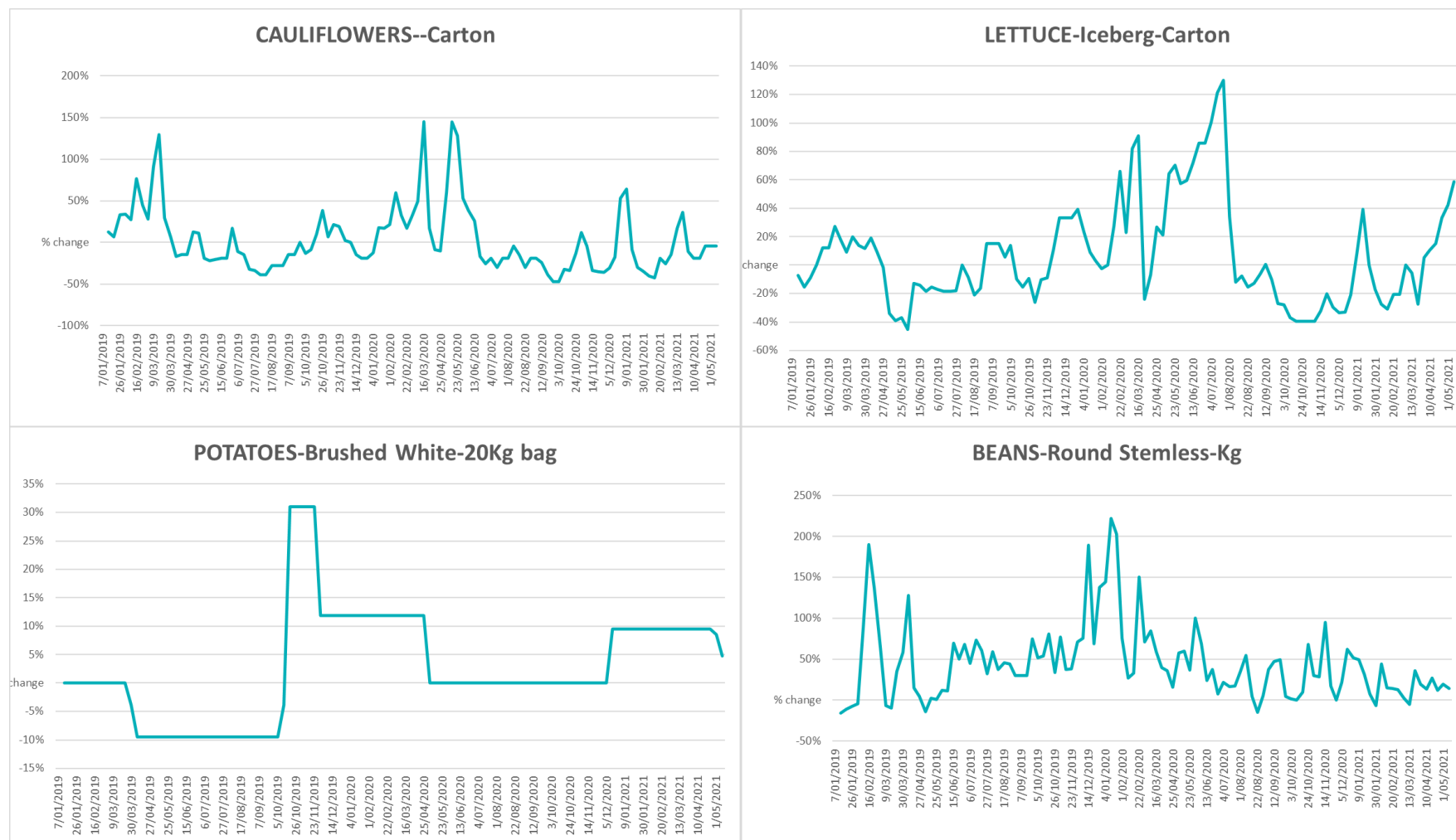


3.5. Selected fruit and vegetable prices









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 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

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

Ownership of intellectual property rights

Unless otherwise noted, copyright (and any other intellectual property rights, if any) in this publication is owned by the Commonwealth of Australia (referred to as the Commonwealth).

Creative Commons licence

All material in this publication is licensed under a [Creative Commons Attribution 4.0 International Licence](#) except content supplied by third parties, logos and the Commonwealth Coat of Arms.

Inquiries about the licence and any use of this document should be emailed to copyright@awe.gov.au.



Cataloguing data

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, 20 May 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

Disclaimer

The Australian Government acting through the Department of Agriculture, Water and the Environment, represented by the Australian Bureau of Agricultural and Resource Economics and Sciences, has exercised due care and skill in preparing and compiling the information and data in this publication. Notwithstanding, the Department of Agriculture, Water and the Environment, ABARES, its employees and advisers disclaim all liability, including liability for negligence and for any loss, damage, injury, expense or cost incurred by any person as a result of accessing, using or relying on any of the information or data in this publication to the maximum extent permitted by law.

Statement of Professional Independence

The views and analysis presented in ABARES publications, including this one, reflect ABARES professionally independent findings, based on scientific and economic concepts, principles, information and data. These views, analysis and findings may not reflect or be consistent with the views or positions of the Australian Government, or of organisations or groups who have commissioned ABARES reports or analysis. More information on [professional independence](#) is provided on the ABARES website.

Acknowledgements

This report was prepared by Emma Pearce and Matthew Miller.