



COCATREL

DIRECT TRADE

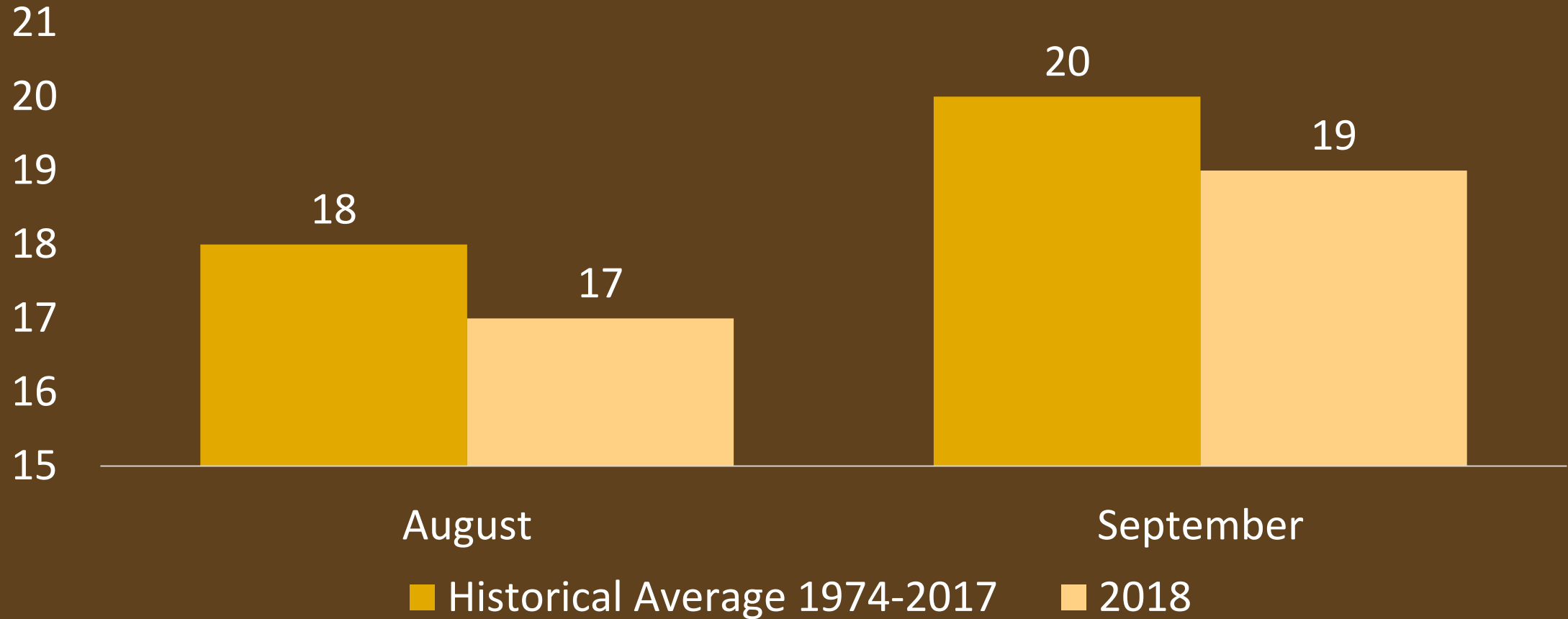
Weather and Agronomic report

Introduction

- Cocatrel with a good capillarity, 8 warehouses we are in more than 90 cities in all over South of Mina's coffee belt, so with the collaboration of our Agronomic departments (32 agronomists) we supply monthly crop reports in order to help our main partners .

Temperature

Average in South of Minas in
Degrees Celcius

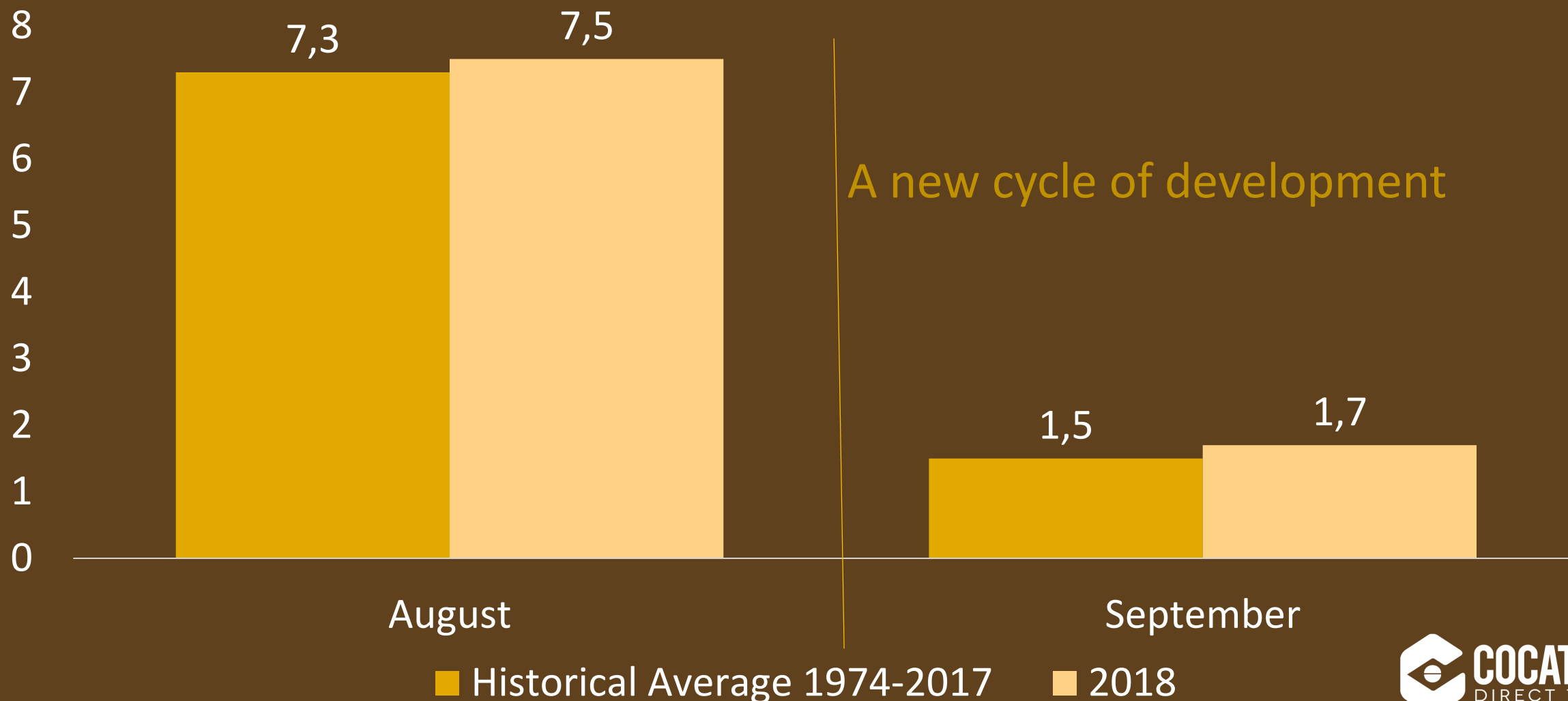


Temperature

- The average temperature in the South of Minas in 2018 is 1 degree Celsius less than the Historical average from 1974 - 2017.

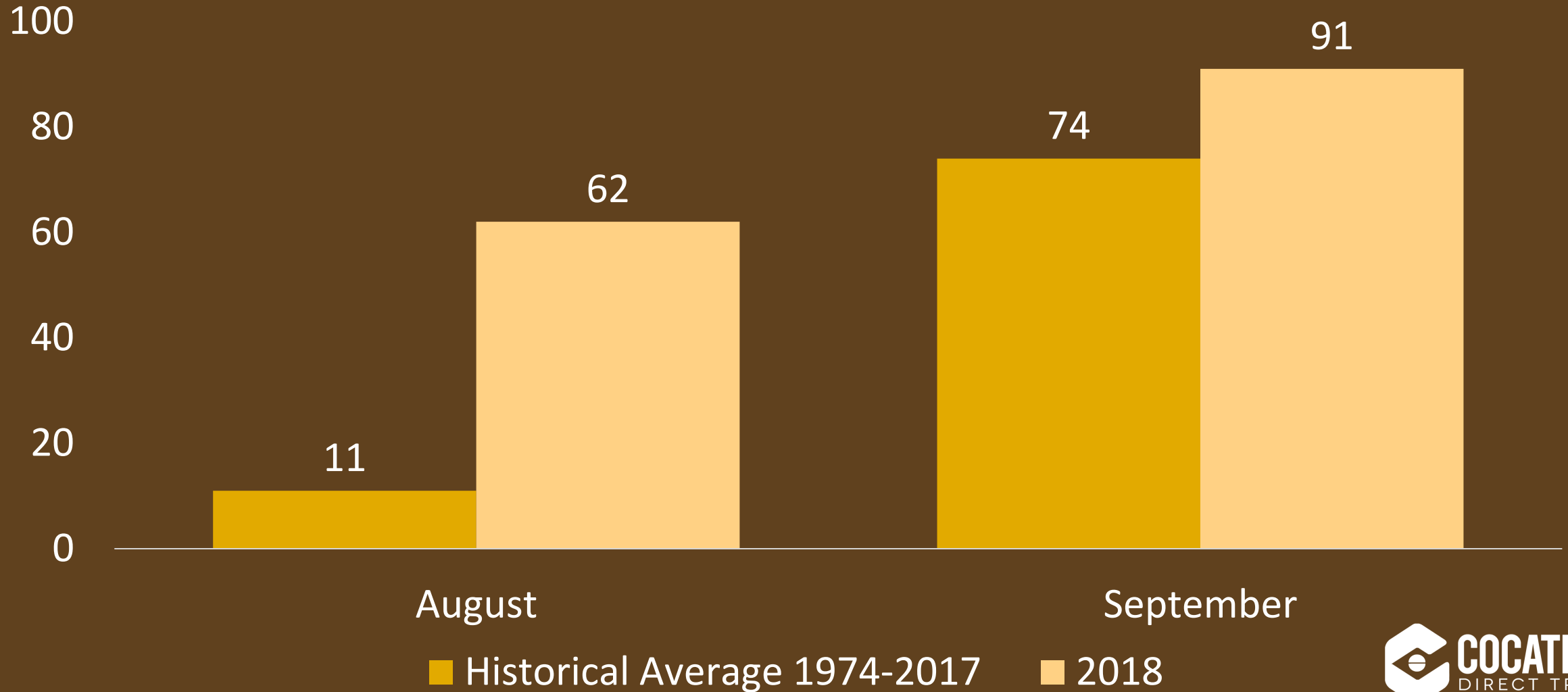
Development of branches

Average in South of Minas in number of Internodes



Rainfall

Average in South of Minas in milliliters



Rainfall

- The volume of rain during the month of August was 7 times the historical average up to September. This saw an increment of 30%.
- Too much rain in August at the end of the harvest resulted in coffee being left on the ground which could lead to an increase in Coffee Berry Borer in 2019
- **The Blooming season is not as uniform as last year so the maturation in 2019 will not be as synchronized.**

The Blooming season is not as uniform as last year so the maturation in 2019 will not be as synchronized

2017-2018



AUG

SEP

OCT

NOV

DEC

JAN

FEV

One large bloom in
September - October

Good Development with
Small % of abortion in
the first phase

Maturation
pretty uniform

The Blooming season is not as uniform as last year so the maturation in 2019 will not be as synchronized

2018-2019



SEP



OCT



NOV

DEC



JAN

FEV

First Blooming in
August

Second Blooming in
Sep-Oct

Last Blooming in
November

Jan
Non uniform maturation

Rancho Grande Estate

06/11/2018

- The blooming season is not as uniform resulting in a less synchronized maturation



SIDE EFFECTS

- **Coffee Berry Borer**
- **BIG % of abortion at the First phase of the bean development**

Coffee Berry Borer

- Too much rain in August (end of Harvest) resulted in coffee being left on the ground. This could lead to an increase in coffee berry borer in 2019
- The period of control starts 90 days after the first flowering. With three different flowering dates there will need to be three control periods to manage this.
- This will make controlling the problem very difficult with the pesticides available in the market to counter this.



2017-2018



Period of control



AUG

SEP

OCT

NOV

DEC

JAN

FEV

2018-2019

Period of control



AUG

SEP

OCT

NOV

DEC

JAN

FEV

BIG % of abortion at the First phase of the bean development

- A large % of nutrients will be absorbed in the first phase of bean development from the primary flowering.
- Evaluations from coffee producers and our agronomist engineers across the South of Minas, report this will leave the latter maturation of cherry (2nd & 3rd flowering) exposed to bacterial & fungal attack.



Overview

- The crop is already estimated to be 20% lower than the 18/19 harvest cycle due to the natural biannual up & down cycles. With the irregular development and a high incidence of pest and diseases during development may further negatively affect the availability of ready to export coffees.



COCATREL
DIRECT TRADE



Gabriel Miari Brito
Agronomist