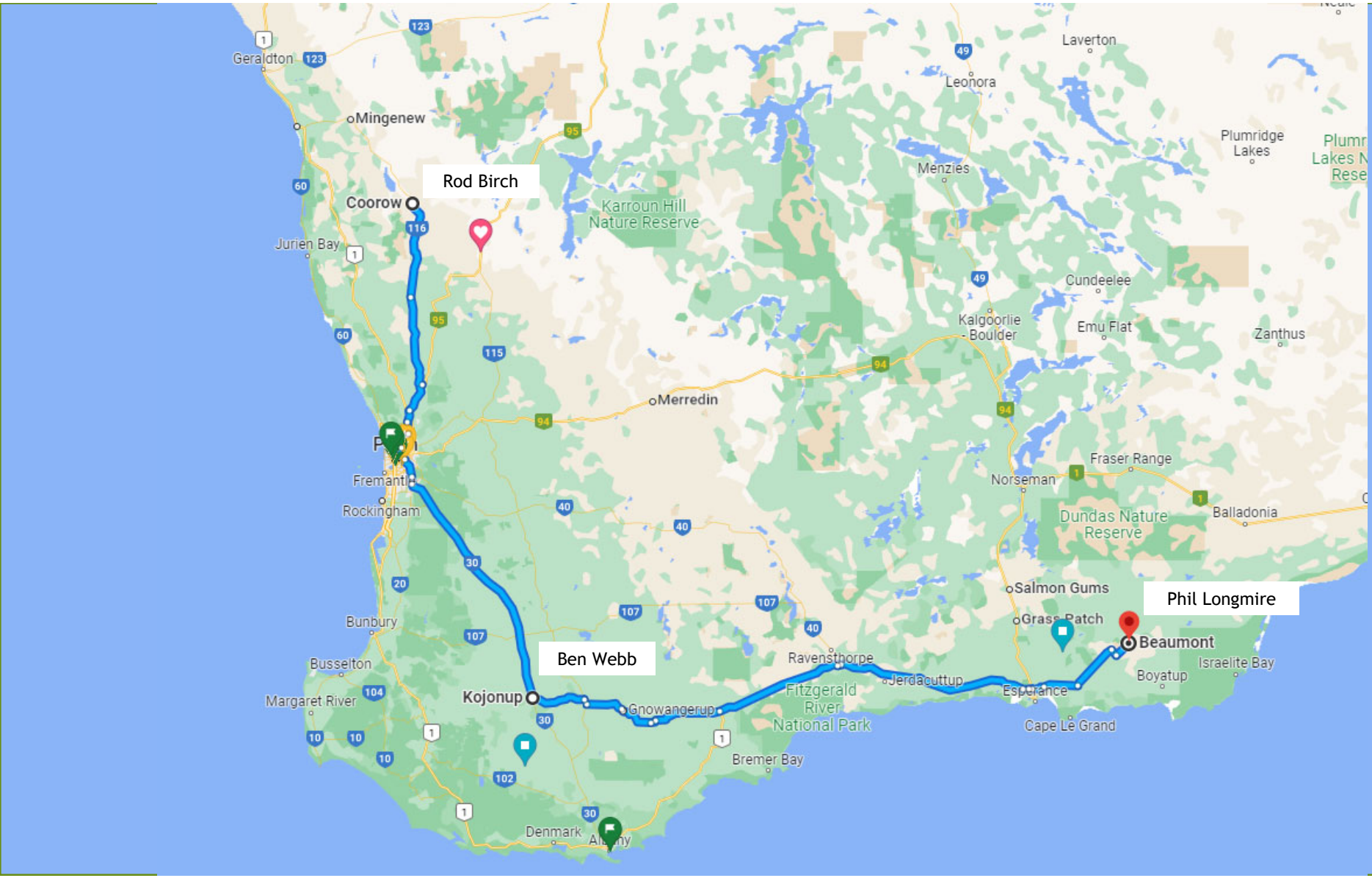

Rod Birch
Ben Webb
Phil Longmire
Geraldton
Mingenew
Coorow
Jurien Bay
Karroun Hill Nature Reserve
Laverton
Leonora
Menzies
Plumridge Lakes
Cundeelee
Kalgoorlie - Boulder
Emu Flat
Zanthus
Merredin
Fremantle
Rockingham
Norseman
Fraser Range
Dundas Nature Reserve
Balladonia
Salmon Gums
Grass Patch
Beaumont
Israelite Bay
Boyatup
Esperance
Cape Le Grand
Bunbury
Busselton
Margaret River
Kojonup
Gnowangerup
Ravensthorpe
Jerdacuttup
Fitzgerald River National Park
Bremer Bay
Denmark

2022 GIWA Pulse Forum

Rod Birch

Coorow, WA

CATALINA FARMS

Introduction

- Cropping only business
- Growing lupins 1982-2022 = 40yrs!!
- ~13,000ha
  - Lupins 15%
  - Canola 25%
  - Wheat 60%
- Selective to soil type
- Following lupins in rotation, limesand/gypsum spread and deep rip

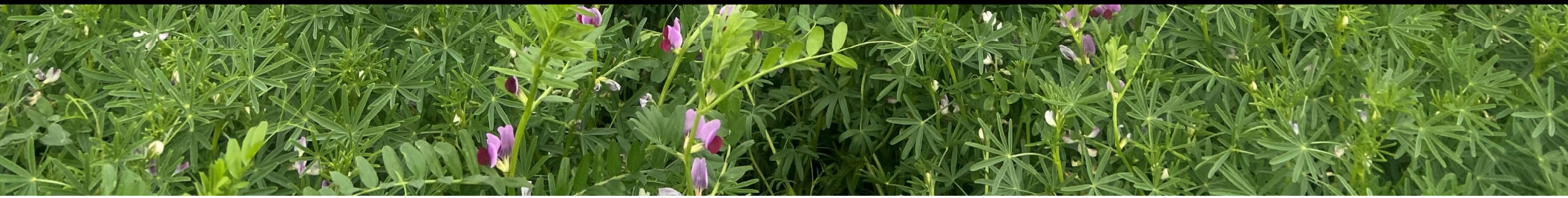
Pros of being a Lupin Grower

- Great break crop contributor
- Paddock disease break
- Different Chemicals/MOA
- Huge nitrogen supply
  - 50kgN/ha year 1, and residual year 2 and year 3
  - Urea @ $1300t = $2.83/kgN
  - So Lupin N = $141/ha equivalent
- On-farm storage/marketing strategy

Lupin Cons

- Pricing has been fairly static
  - Geared to animal nutrition feed market – highly substitutional
- More sensitive to seasonal extremities
- Relative less generic gains in varietal development
  - Mostly WA grown and developed
- Require:
  - Market awareness/demand as food ingredient
  - Genetic yield improvements
  - Disease resistance
  - Herbicide package
  - Shattering
  - Alkaloid

Ben Webb
Kojonup




• 11 June pre grazing
• 16 July after 20 DSE

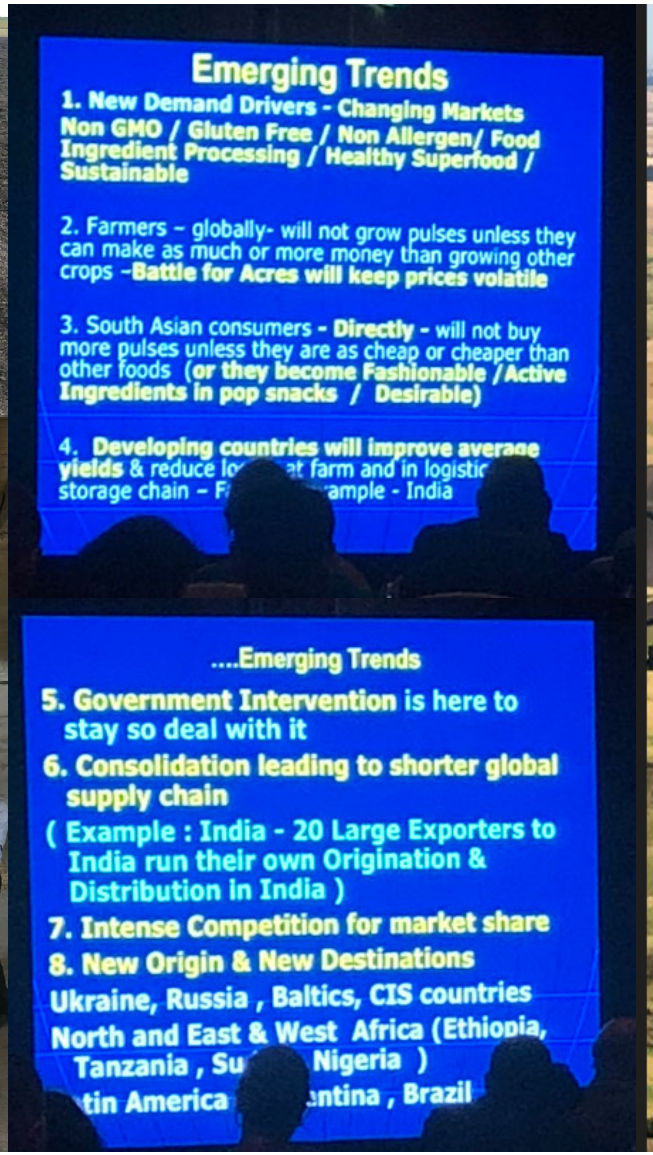
PULSES -GROWING THE POOR COUSIN

GIWA PULSE FORUM 2022

PHIL, BINDY & TOM LONGMIRE
COORONG PAST CO


UKRAINE


Chick Pea
Meksikanskiy


Emerging Trends
1. New Demand Drivers - Changing Markets
Non GMO / Gluten Free / Non Allergen/ Food Ingredient Processing / Healthy Superfood / Sustainable
2. Farmers – globally- will not grow pulses unless they can make as much or more money than growing other crops –Battle for Acres will keep prices volatile
3. South Asian consumers - Directly - will not buy more pulses unless they are as cheap or cheaper than other foods (or they become Fashionable /Active Ingredients in pop snacks / Desirable)
4. Developing countries will improve average yields & reduce lo at farm and in logistic
storage chain – F ample - India
....Emerging Trends
5. Government Intervention is here to stay so deal with it
6. Consolidation leading to shorter global supply chain
(Example : India - 20 Large Exporters to India run their own Origination & Distribution in India)
7. Intense Competition for market share
8. New Origin & New Destinations
Ukraine, Russia , Baltics, CIS countries
North and East & West Africa (Ethiopia, Tanzania , Su Nigeria)
tin America ntina , Brazil


PALOUSE MOUNTAINS, USA
SHIFT TO HIGHER VALUE LEGUMES
LENTILS (COMPETITION MIDWEST)
GARBANZO BEANS(CHICKPEAS)

- RAINFALL 425-450MM
- PWCWB – PWCWCB –PWLWCB
- CIRCLE VALLEY LOAM
- RED/ GREY SODIC CLAYS
- CTF
- 100% CONTINUOUS CROP
- PEAS MOST CONSISTENT LEGUME
- LENTILS/ FABA BEANS SOIL SENSITIVE
- ON FARM TRIALS

PRO'S AND CONS OF LEGUMES IN OUR SYSTEM

POSITIVES

- INCREASE WHEAT YIELD AVERAGE
- LOWER RISK PROFILE- INPUTS
- WUE INCREASED FOLLOWING LEGUME
- WEED MANAGEMENT
- ROTATION SUSTAINABILITY

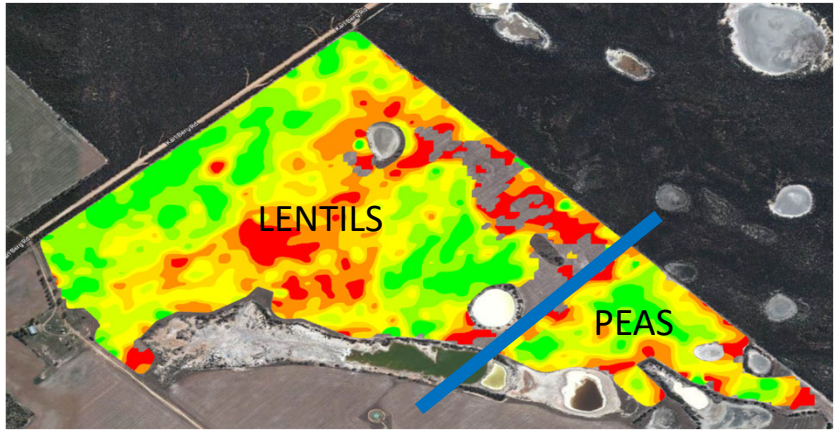
NEGATIVES

- CANOLA PRICE DOUBLE LEGUME PRICE COMPROMISES WHEAT AND FARM PROFIT
- INCREASED MACHINERY COSTS – HARVEST
- MARKET ACCESSABILTY – VOLUME AND BUYERS
- STORAGE
- SOIL SUITABILITY
- WATERLOGGING

GOALS

$1000 /HA

- IMPROVED VARIETIES TO SUIT OUR ENVIRONMENT – R & D
- COMBATTING SOILBORNE DISEASES –IN FURROW TREATMENTS
- FUNGICIDE ACCESSABILITY IN AUSTRALIA – " 2nd TIER INDUSTRY "
- CHICKPEA ADAPTATION TO SOUTH COAST – WINTER DEVELOPMENT, WATERLOGGING AND SOIL CONSTRAINTS
- FROST SUSCEPTIBILITY
- INCREASING PULSE INDUSTRY PRODUCTION



National Pulse and Oilseed Root Health Survey
Sample Report

Paddock:	Grower:	Agronomist:	Local contact:
Not recorded	Not recorded	Tom Longmire	carla.wilkinson@dpird.wa.gov.au

Average Root Health Score: 1.75 Nearest Town: BC77208

Observations: Rhizoctonia and Nematode root damage indicated

Pathogen/disease	DNA units	Comment Threshold	Result
Club root	kDNA copies/g sand	2	0
Stem Nematode	nematodes/100 g sand	1	0
*Phytophthora drechsleri**	kDNA copies/g sand	10	0
Phytophthora medicaginis	kDNA copies/g sand	2	0
Phytophthora megasperma	kDNA copies/g sand	2	0
Phytophthora clandestina	pgDNA / g sand	2	0
Phoma rabiei	kDNA copies/g sand	2	0
Phoma pinodella	pgDNA/g sand	10	621
Aphanomyces euteiches	pgDNA/g sand	5	0
Aphanomyces trifolii	kDNA copies/g sand	5	0
Pythium root rot (clade f)	pgDNA/g sand	10	67
Pythium root rot (clade i)	pgDNA/g sand	10	0
Black root rot	kDNA copies/g sand	10	0
Sclerotinia	kDNA copies/g sand	10	0
Blackleg	pg DNA / g sand	10	0
Charcoal rot *(Macrophomina)*	kDNA copies/g sand	100	2
P. thornei	nematodes /g sand	10	0
P. neglectus	nematodes /g sand	10	1
P. quasitereoides	nematodes /g sand	10	0
P. penetrans	nematodes /g sand	10	0
R. solani AG2.1	pgDNA/g sand	10	0
R. solani AG2.2	pgDNA/g sand	10	0
R. solani AG4	pgDNA/g sand	10	0
R. solani AG8	pgDNA/g sand	2	5
Eradu	pgDNA/g sand	5	0

- DNA assessments were on plant roots and lower 5cm of stems, these were processed with 200 grams of sand.
- Contact your local advisor for management advice.
- *Tentative identification

Comments

Roots are moderately unhealthy.

Black spot test detects Didymella pinodes and Phoma pinodella; the latter can infect lower stem and roots of a broad range of pulses and pasture legumes.

Pythium (clades F and I) causes breakdown of the root cortex and the effects are worst in cold wet soils. Pulse and oilseed seedlings are the most vulnerable.

Rhizoctonia solani AG8 symptoms include localised loss of root cortex, spear tips form as infection progresses through the roots. In cereals infection may be confined to crown roots.


GIWA
Grain Industry Association of Western Australia
PASE
• Pulse Association of the South East
• GIWA
• Mark Seymour
• Organisers and Speakers