PALMELIT

OIL PALM SEEDS - CIRAD INSIDE

How do breeders accompany oil palm producers towards sustainability ?

Innovation in planting aterials

Breeders & sustainability

Bring **welfare** to the oil palm growers :

- Yield (FFB, OER)
- Ease to harvest (growth rate,…)

Bring **security** to the oil palm growers :

- Adaptation to diseases (genetic resistances)
- Adaptation to climat changing (tolerance to drought)

Rentability neads innovations

EL CAMBIO ES NUESTRA FUERZA VITAL,
EL ESTANCAMIENTO ES NUESTRA SENTENCIA DE MUERTE…

No future without innovation

- 2018 : oil palm plantation: 44 t/FFB/ha x 27 %
  (Guatemala, seed & clones) (12 t/ha of oil)

100 years of innovations

2010/20's : Bud Rot (PC) resist.
2010's : Low Lipase
2000's : Ganoderma resist.
1990's : Interspecific hybrids
1970's : Fusarium wilt resist.
1957 : Breeding scheme.
(SSR, FIS,..)

- FFB Yield (continuous)
- OER (continuous)
- Growth rate

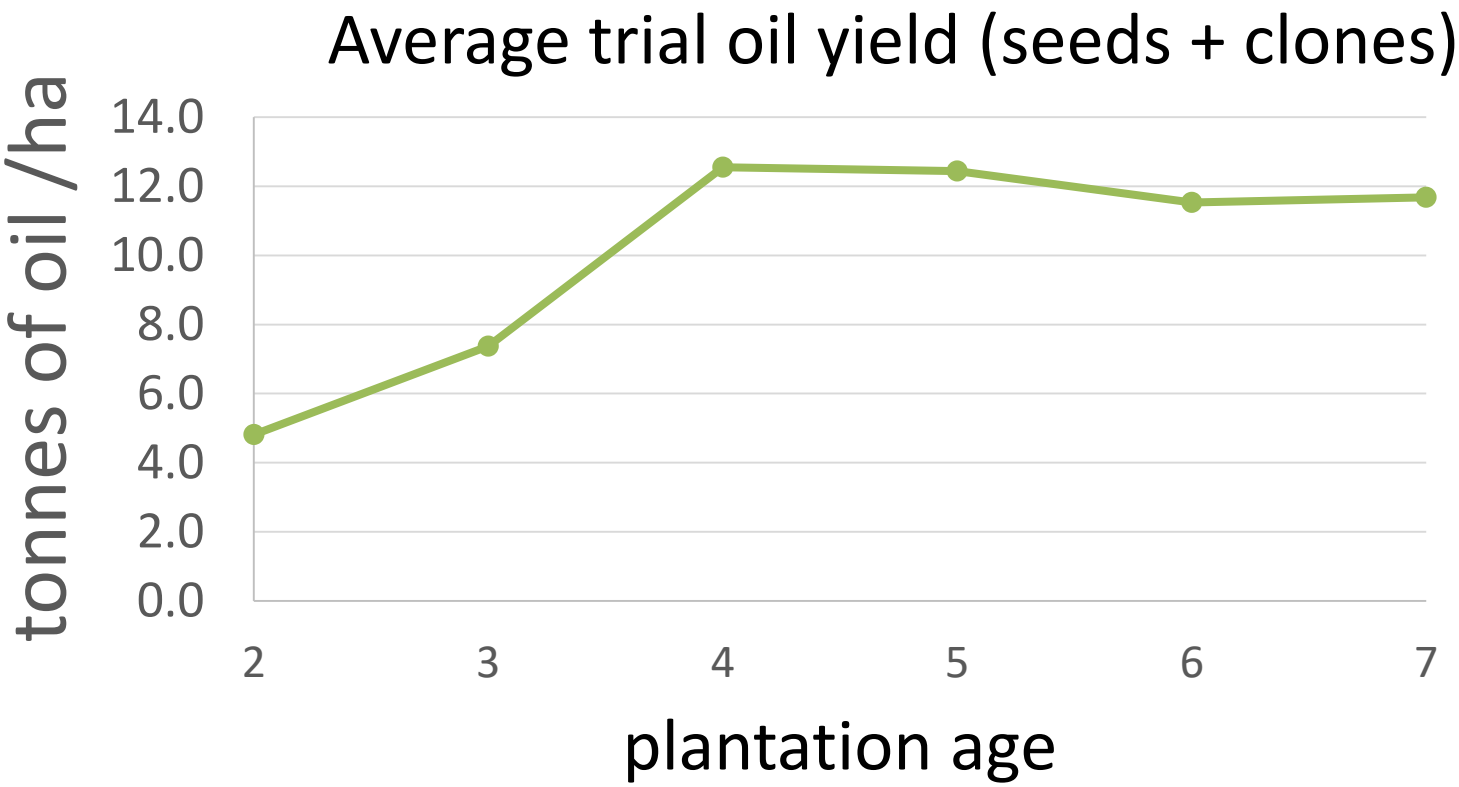
1947/55 : Heterosis
1941 : D x P

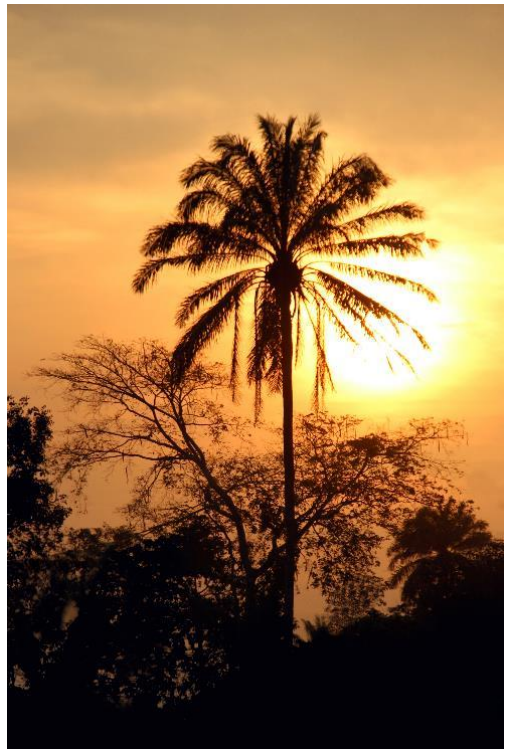
- 1918 : wild oil palms: 4 to 6 t/FFB/ha x 10 %
  (African groves) (480 Kg/ha of oil)

Welfare :

FFB Yield (continuous)
OER (continuous)
Growth rate
Interspecific hybrids (1990's)
Low Lipase (2010's)
…

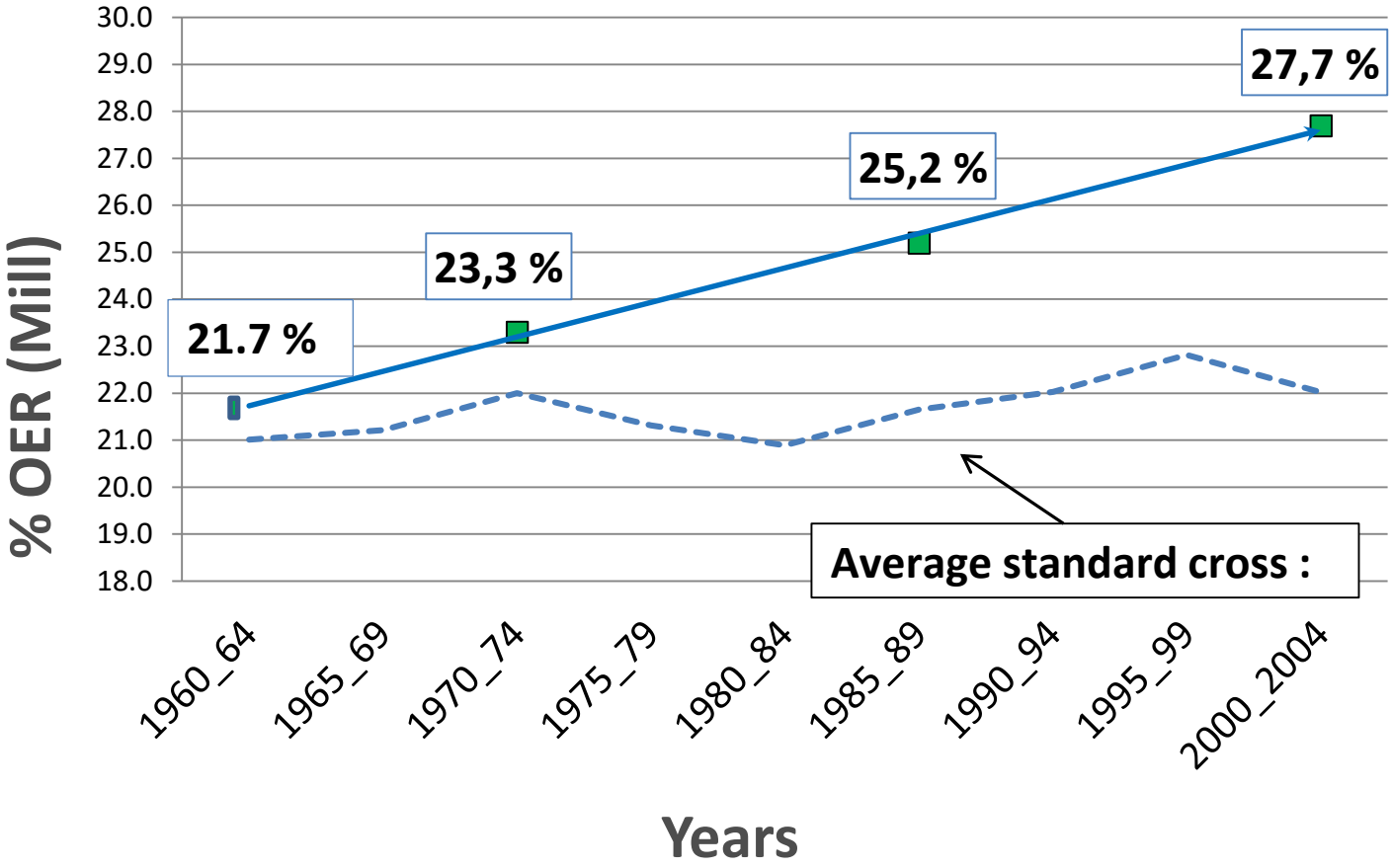
FFB + OER = oil Yied



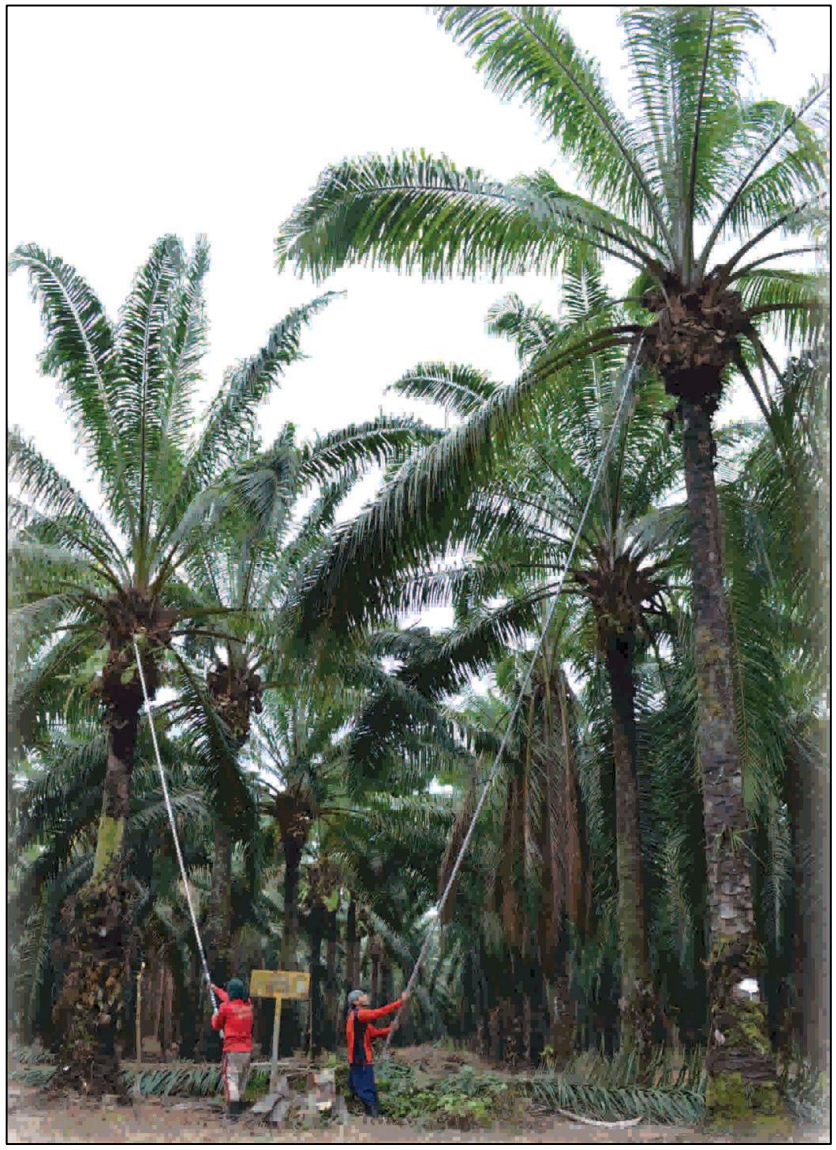


Thanks to HAME group Guatemala

OER improvment



Growth rate



Typical
Deli x La Mé

Typical
Deli x Avros

Thanks to UPOIC group Thaïland

Security :

Adaptation to drought

Adaptation to diseases

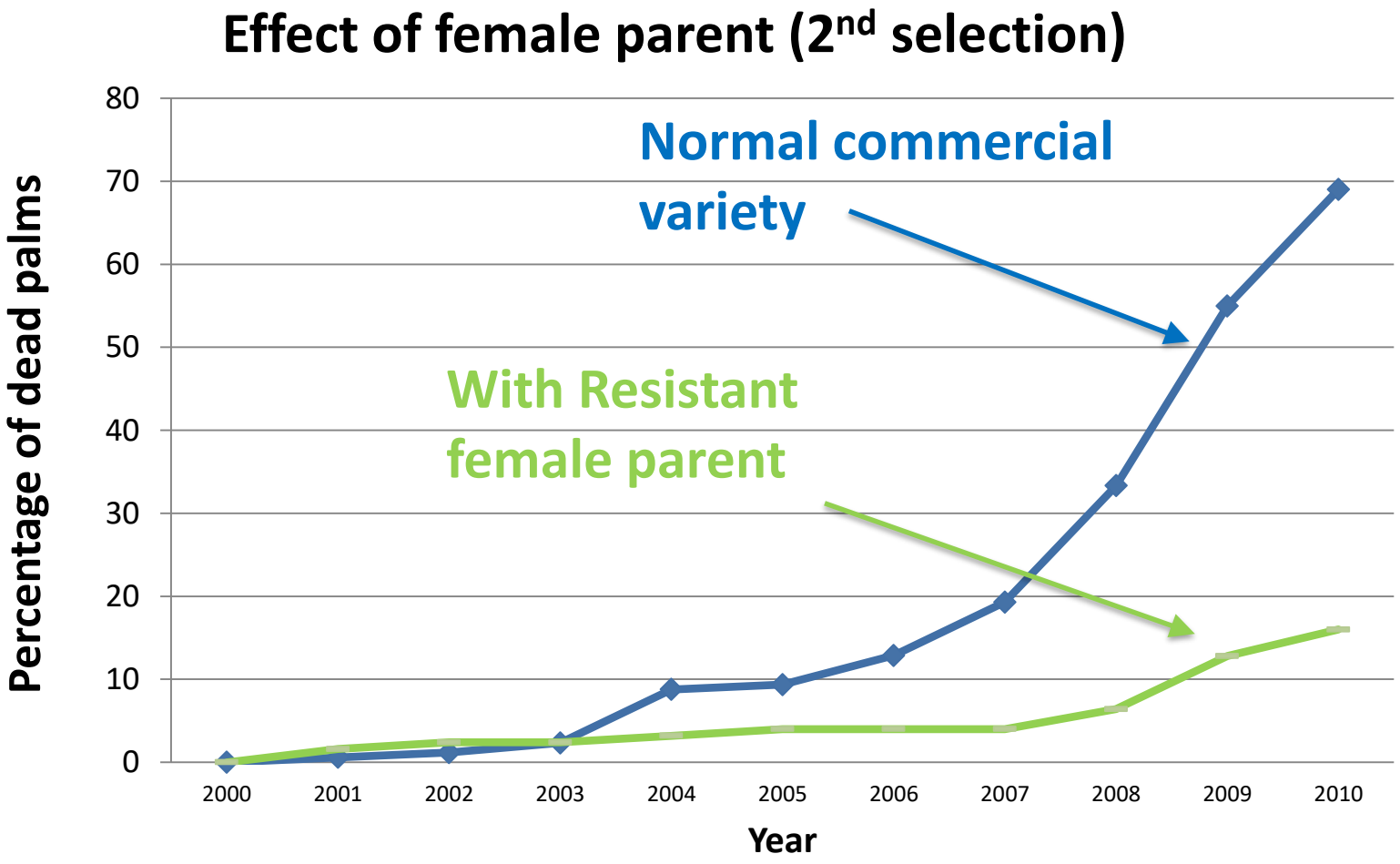
Ganoderma : Intermediate Resistances (IR)

Fusarium : High Resistances (HR)

Bud Rot (PC) : from IR to HR …

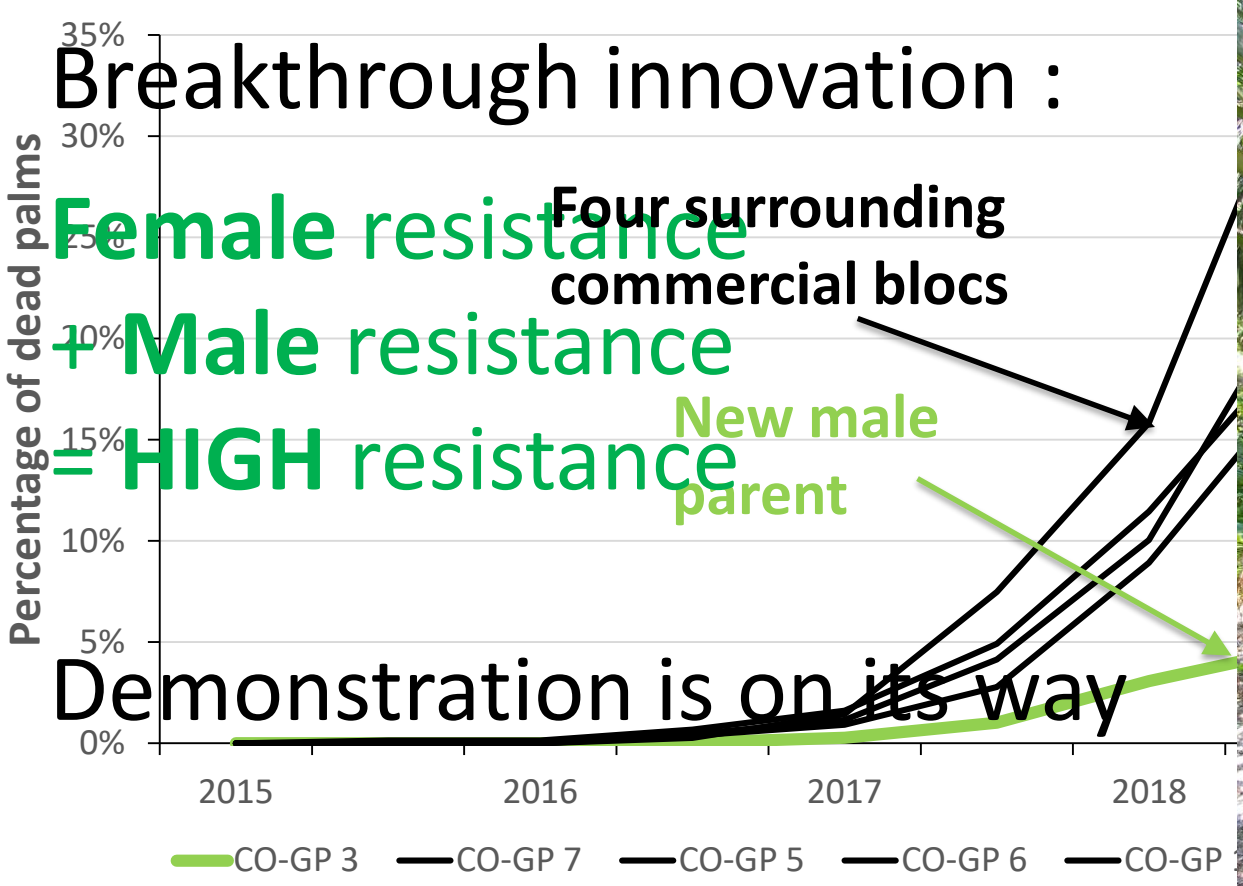
PC (Colombia)

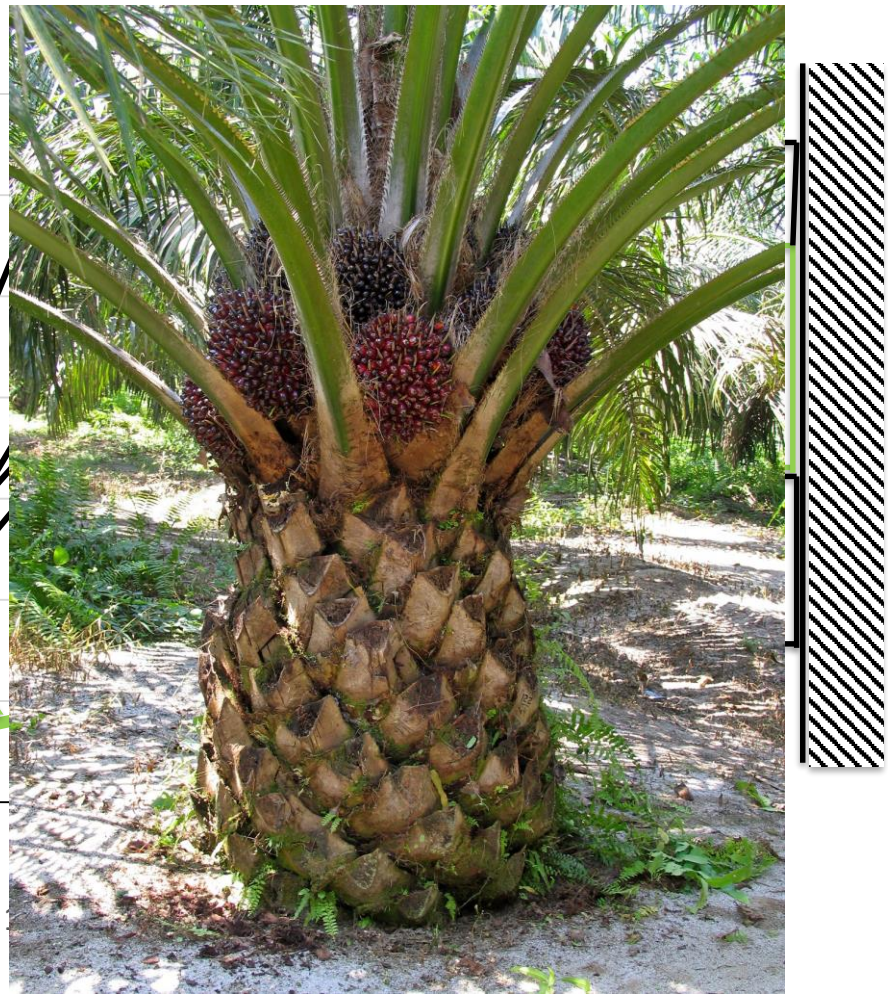
Bud rot : effect of female parent



Thanks to
PalmElit
Murrin Corp
& HLC

Bud rot : effect of New male parent





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Gracias
Thanks

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