

IDPI - SOJA DESCRIPCIÓN MORFOLÓGICA

GRUPO 12

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Ríos, Daniel
Ricardo



Miranda, Erick
Enrique



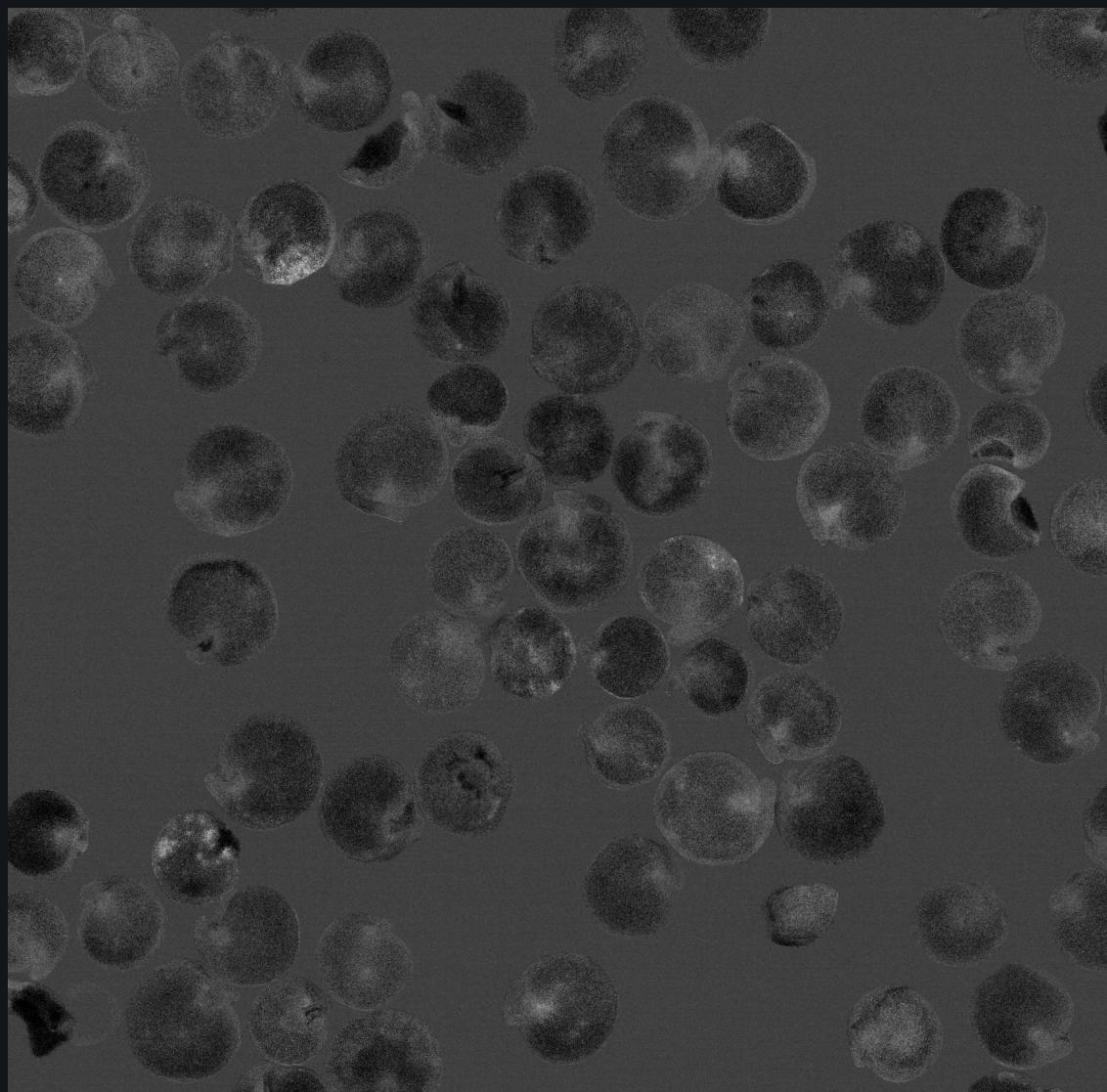
Serrano,
Eduardo
Alfredo Adrián

PRESENTACIÓN DEL PROBLEMA

SOJA - DESCRIPCIÓN MORFOLÓGICA

1 Condiciones de Iluminación No Uniforme

3 Superposición y Contacto de Objetos



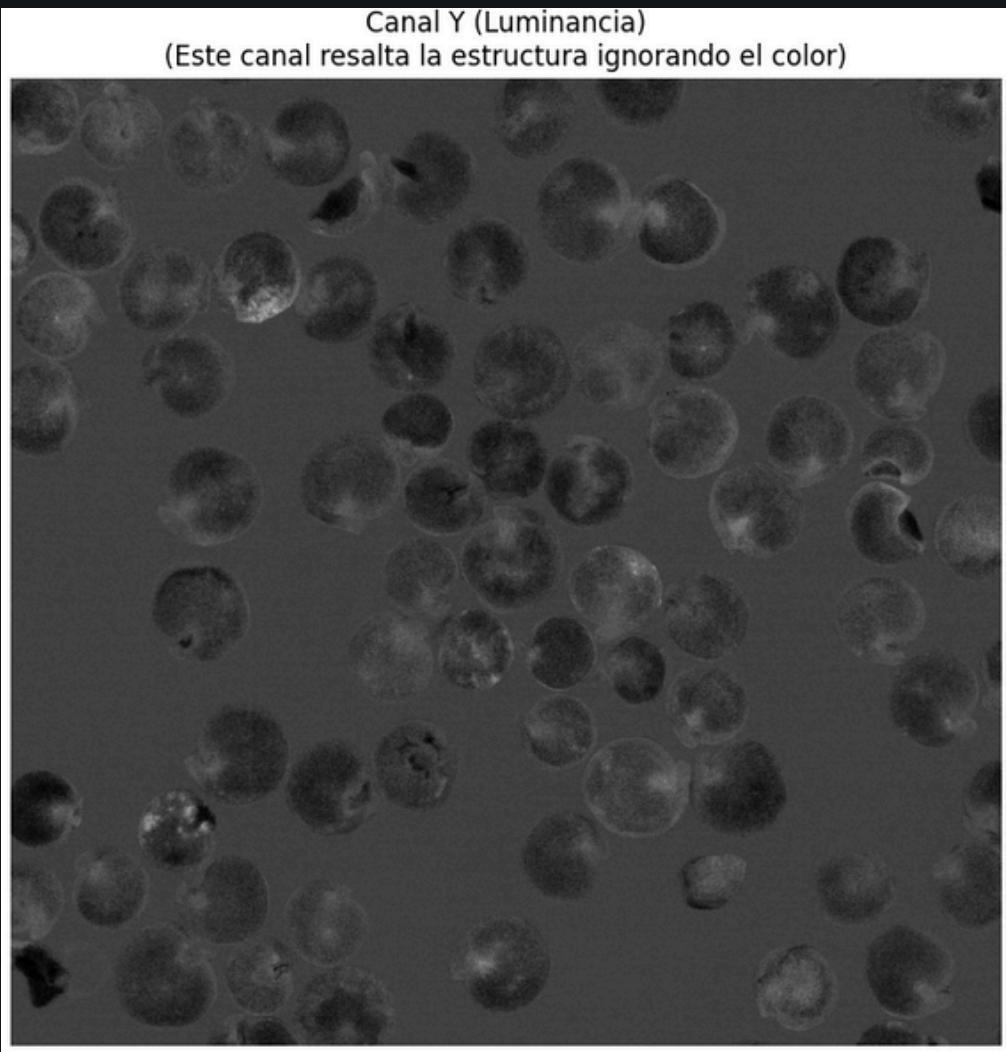
2 Subjetividad del Análisis Manual

4 Necesidad de Caracterización Morfológica

PREPROCESAMIENTO

Luminicidad

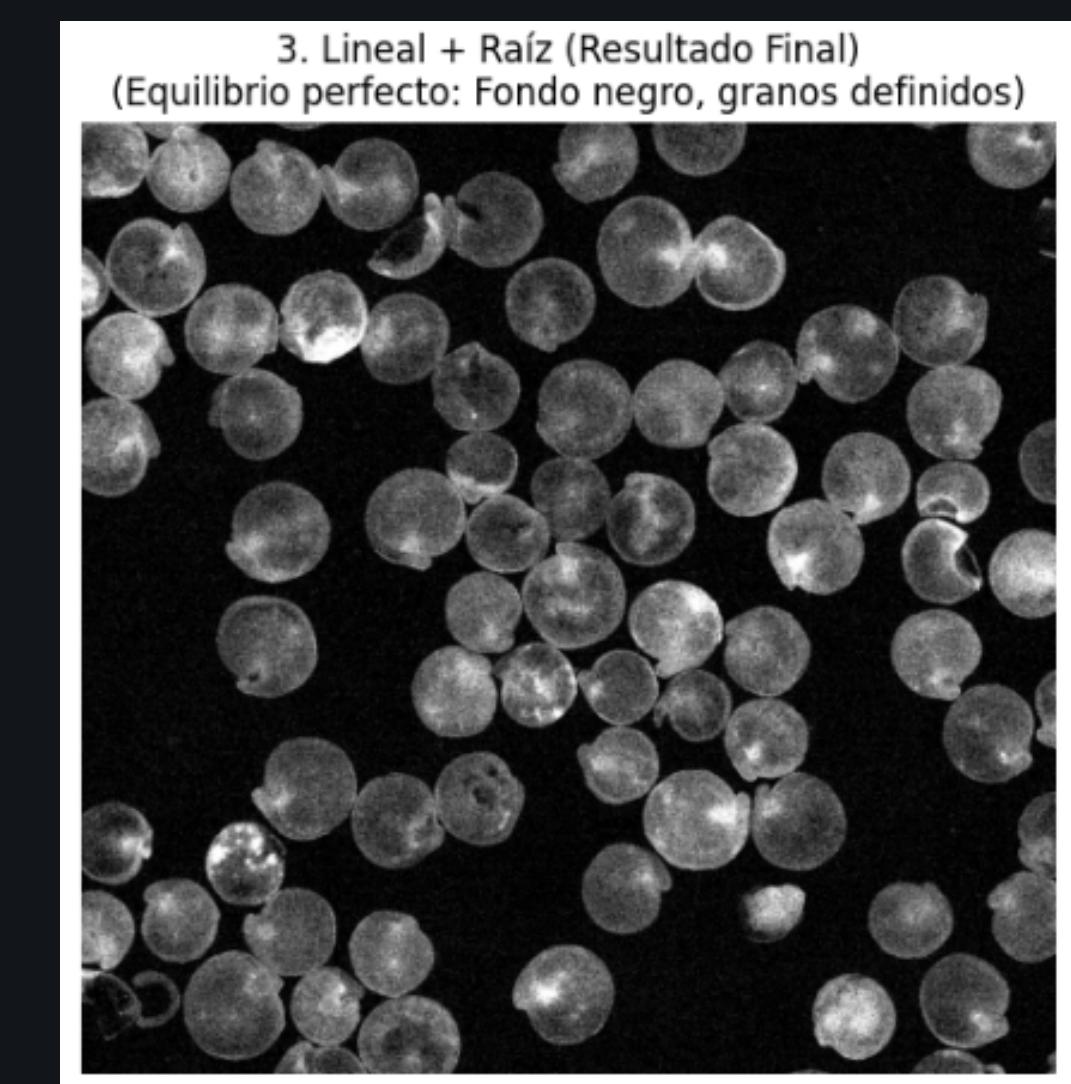
Canal Y



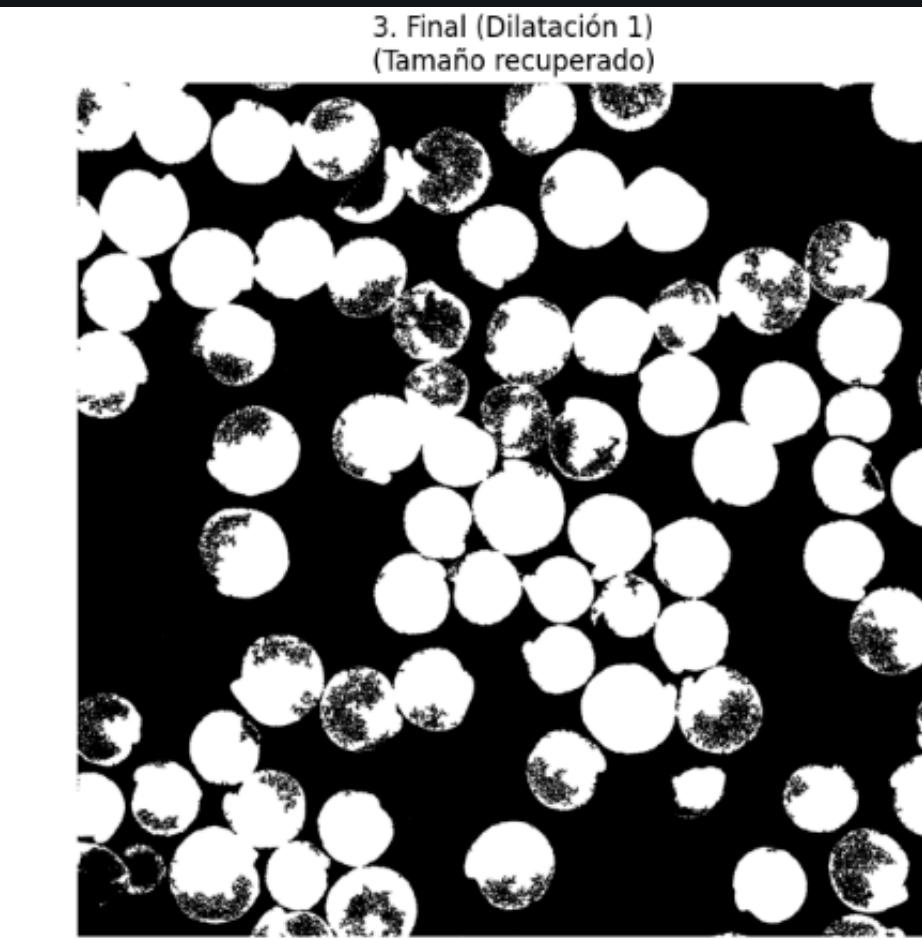
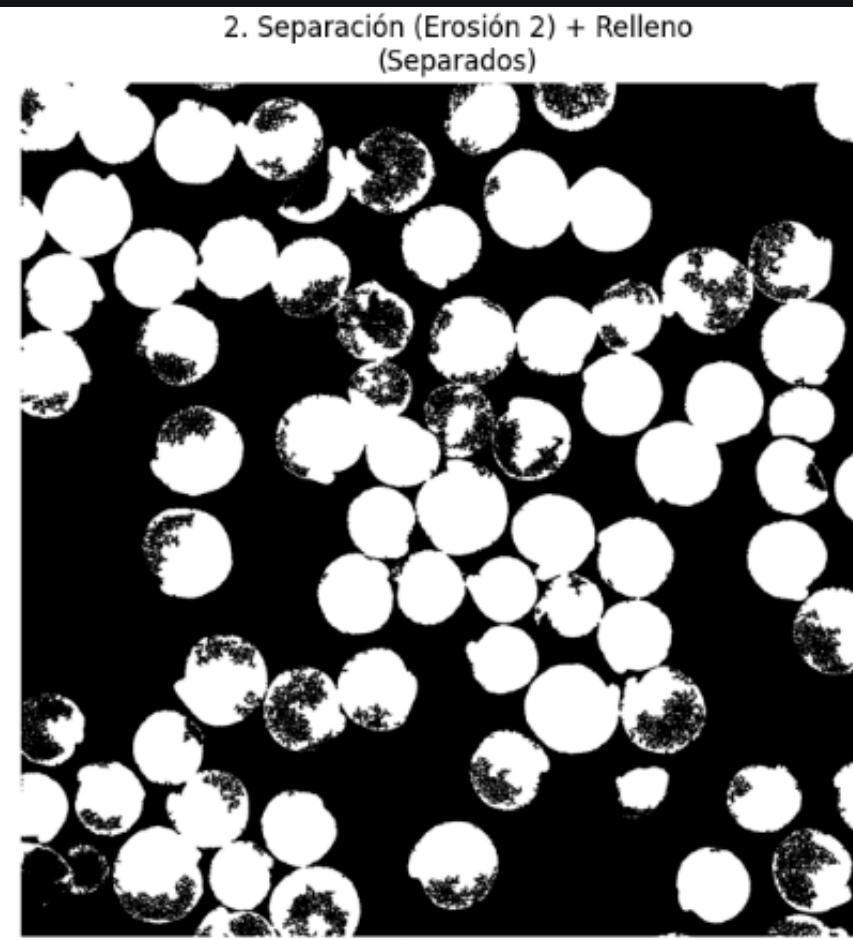
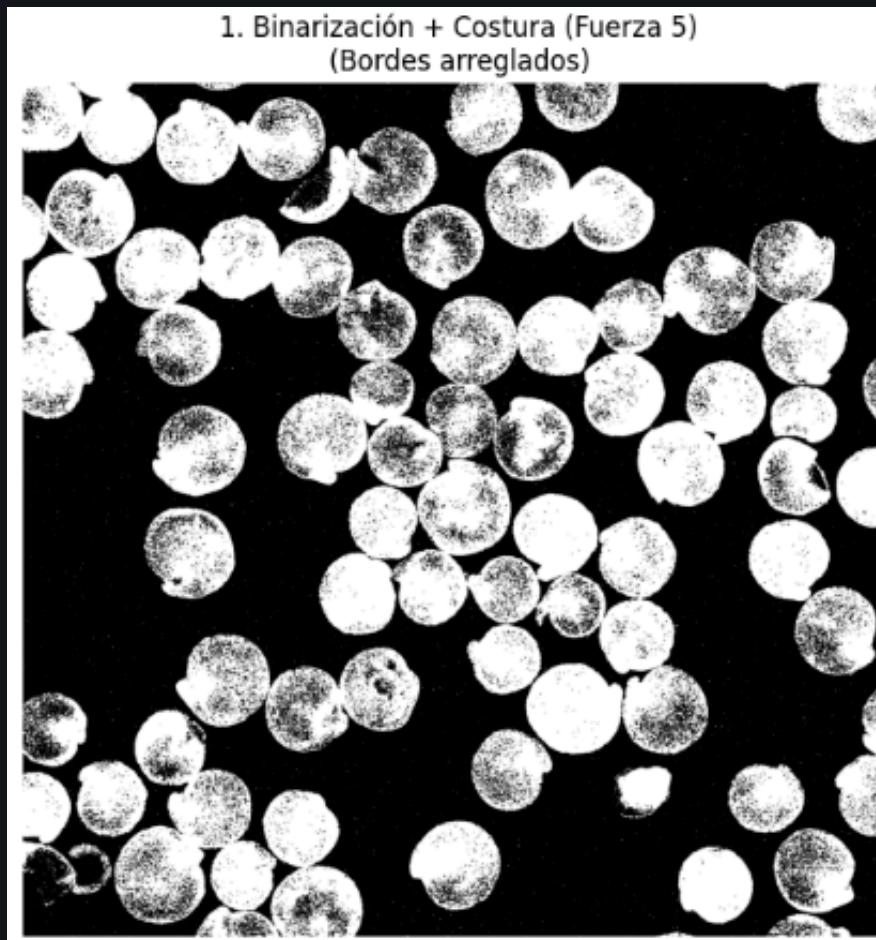
Lineal a Trozos



Raiz



SEGMENTACIÓN



Cierre (Closing)

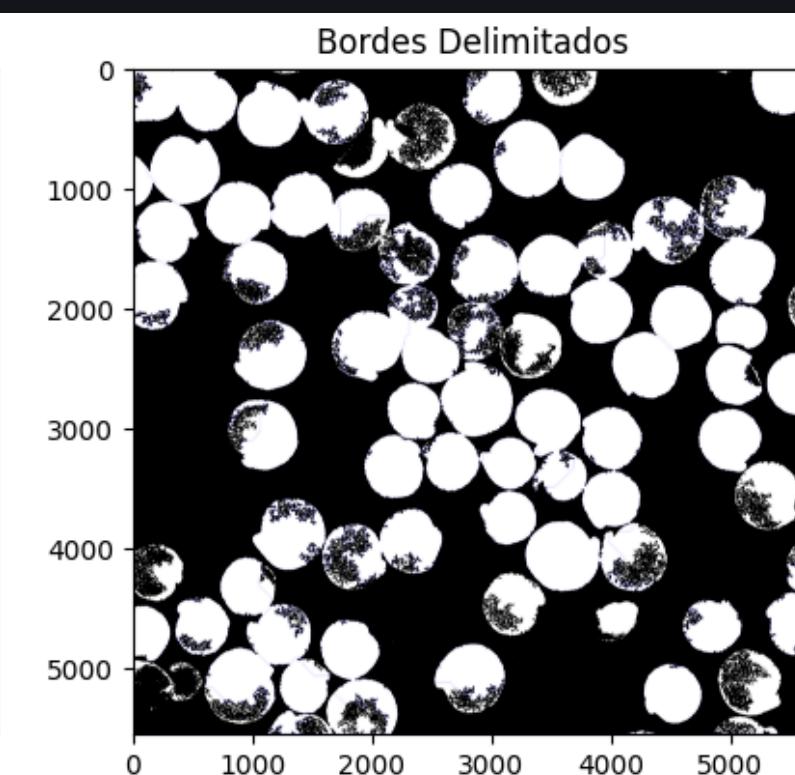
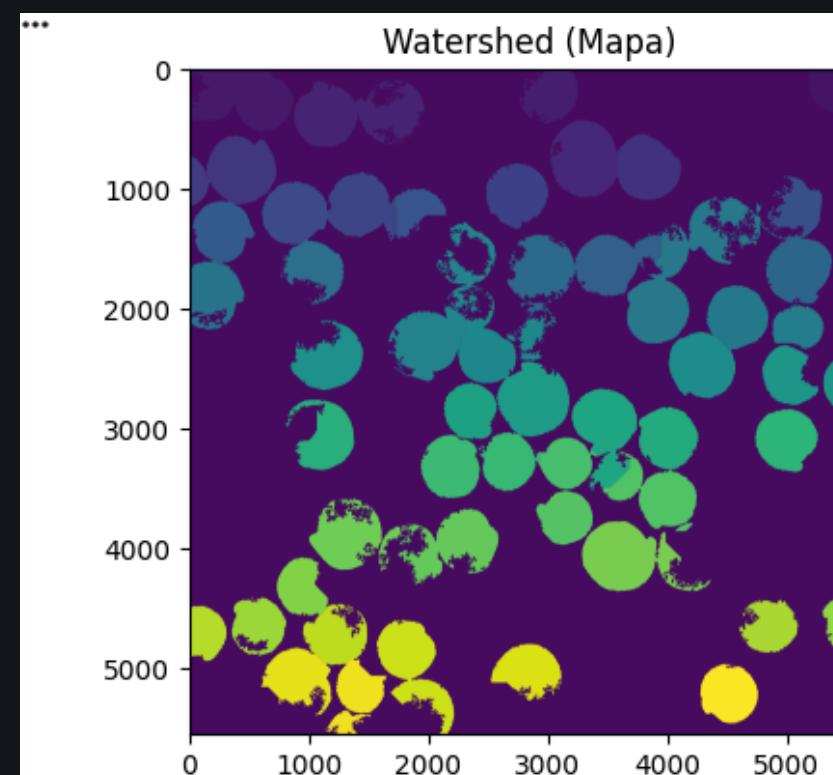
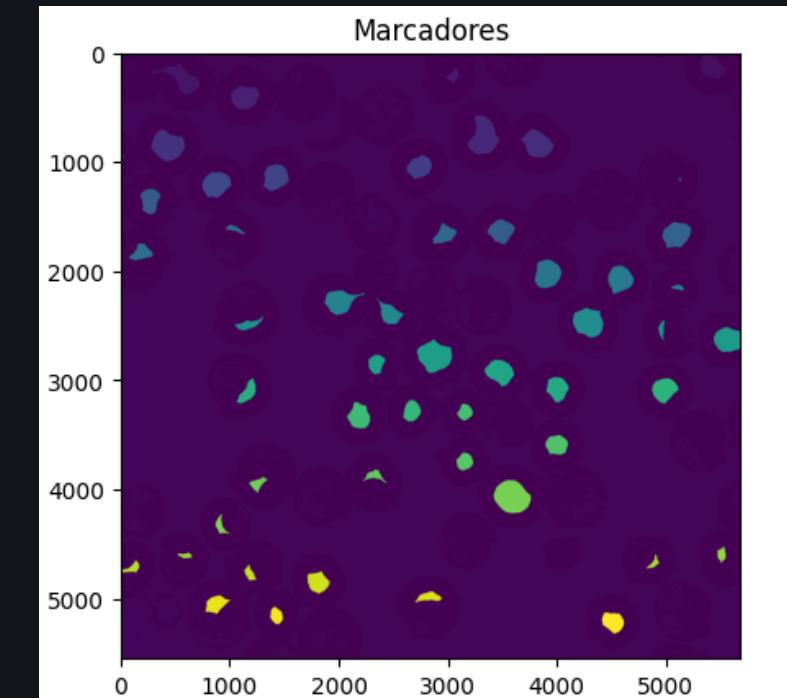
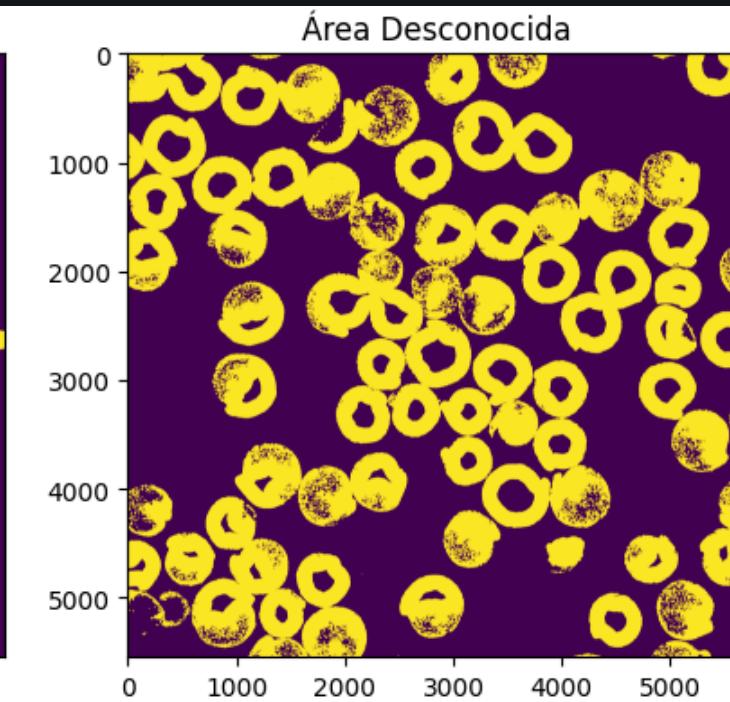
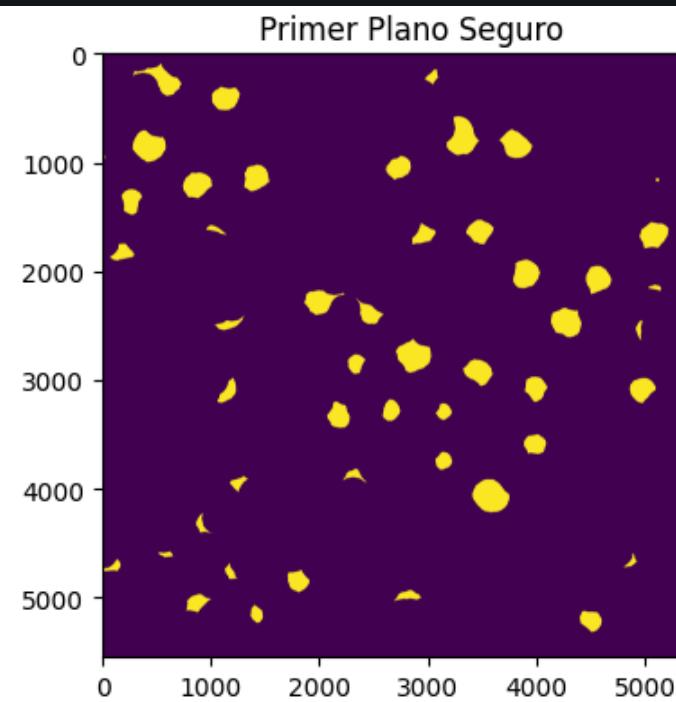
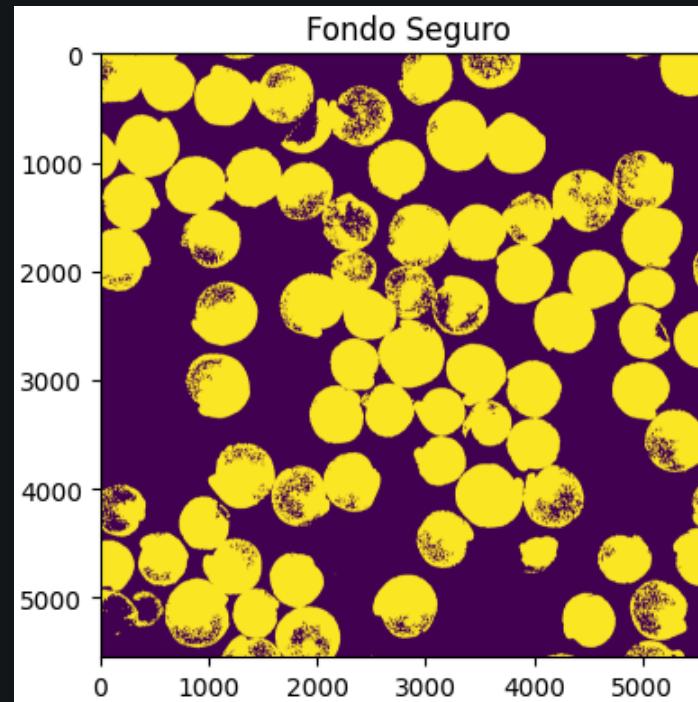
Relleno

WATERSHED

Areas seguras

Objetos seguros

Area desconocida

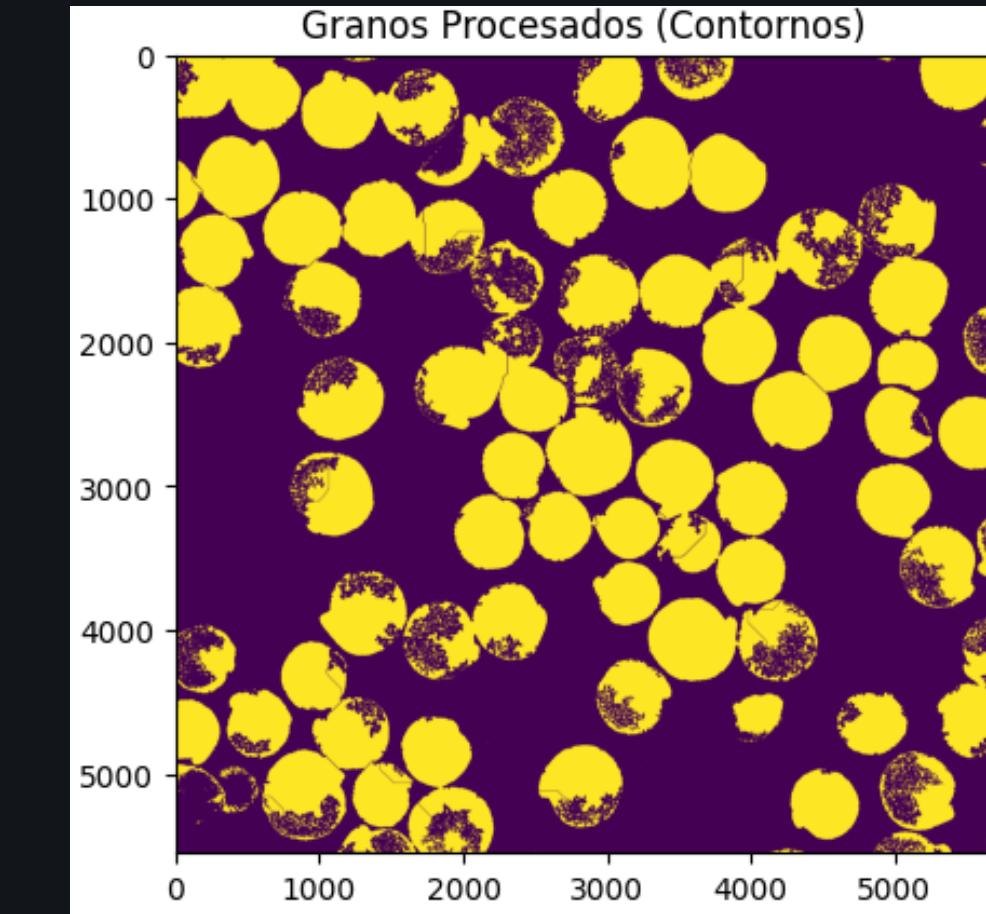
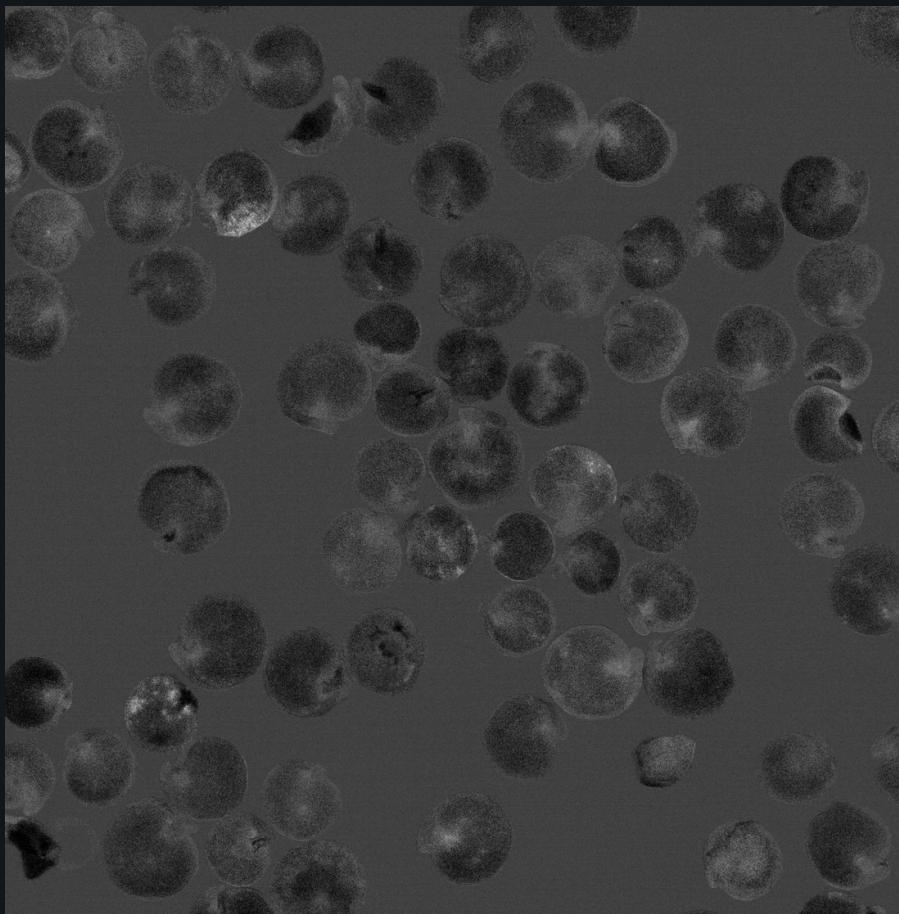


Transformada de
Distancia

- PERMITIÓ CORTAR LAS UNIONES ENTRE GRANOS SUPERPUESTOS Y ASIGNAR A CADA SOJA UNA ETIQUETA ÚNICA
- RESOLVIENDO EL PROBLEMA DE LA AGLOMERACIÓN Y PERMITIENDO SU ANÁLISIS INDIVIDUAL

DESCRIPTORES

Granos detectados: 53

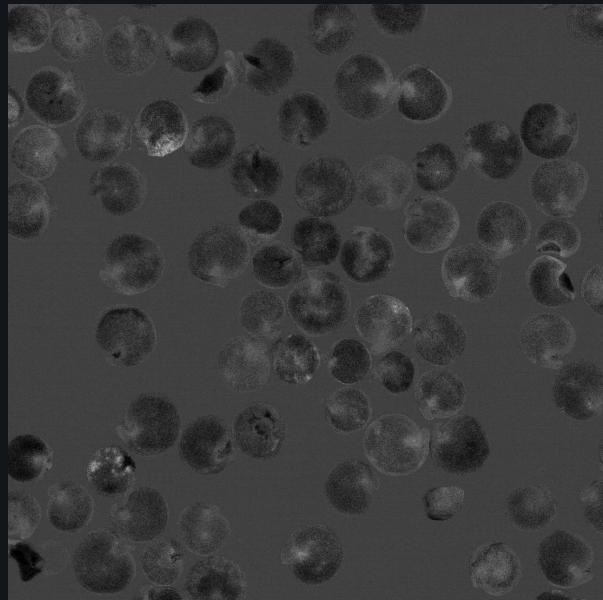


ID	Area	Perimetro	Solidez	Convexidad	Extension_Caja	Extension_Circulo	Elongacion	Excentricidad	Relacion_Radios	Rizo_Aprox
2	1.731.275	17.904.722.082.614.800	9.832.906.891.880	11.348.202.533.411.900	8.391.375.365.943.5	7.335.617.558.599.26	10.527.632.275.124.50	3.126.111.035.049	7.083.339	617.914.173.251.0
3	3.472.000	4.672.654.209.494.590	8.544.211.124.700	18.709.379.199.155.500	7.428.454.059.975.3	5.077.051.927.587.52	161.569.410.776.102	7.854.469.083.149	47.557.876	370.999.759.696.4
4	1.569.770	3.684.914.093.017.570	8.592.580.834.095	23.861.979.662.671.900	6.652.385.250.729.9	7.177.847.685.092.74	12.163.643.685.964.60	5.693.112.435.173	6.878.401	27.179.671.522.99
5	3.892.290	8.898.106.526.613.230	7.359.759.936.921	3.166.164.147.453.950	6.347.784.393.637.6	4.126.074.434.945.73	21.458.396.475.017.70	8.847.752.147.355	43.905.577	25.069.191.326.69

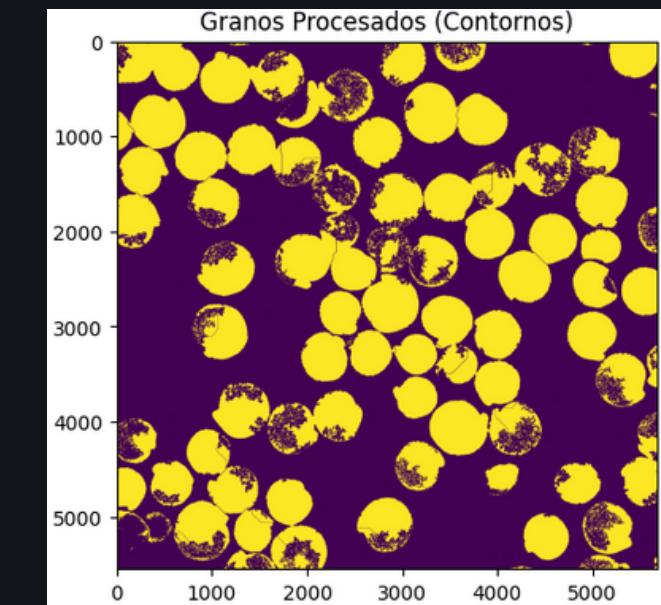
Todas las medidas en: medidas_avanzadas.csv

CONCLUSIÓN

1 Preprocesamiento en el
Canal de Luminancia



2 Realce Híbrido



3 Algoritmo Watershed

**¡MUCHAS
GRACIAS!**