



Nutritional Deficiencies Symptoms









Nutritional Deficiencies Symptoms Guide



Nitrogen

- Widespread chlorosis in green leaves
- Less vegetative growth
- Progression of chlorosis and leaf fall



Phosphorus

- Stunted plants
- Old leaves, small and bluish color
- Reduction in the number of pods



Potassium

- Old leaves with chlorosis at the edges, advancing to the center of the leaflet
- Necrosis of edges



Calcium

- New leaves with chlorosis from the edges to the center
- Flowers fall
- Pods fall (stalk of collapse)



Magnesium

- Old leaves with internerval chlorosis
- Progressive yellowing



Sulphur

- Widespread chlorosis in new leaves
- Reduced size and progression of chlorosis

Boron

- New leaves with small and deformed leaflets, in bluish green color
- Malformed growth points
- Flowers and pods fall

Zinc

- New, small and lance-shaped leaves
- Chlorosis that may progress to brown tones
- Curving of the main branch

Manganese

- New leaves with internerval yellowing
- Chlorosis that may progress to brown tones
- Decrease in vegetative growth

Iron

- New leaves with internerval whitish can progress to the ribs
- Emergence of brown necrotic spots

Cobalt and Molybdenum

- Chlorotic leaves
- Reduction in vegetative growth
- Small nodules, with pale yellow or greenish inner color

Copper

- New leaves with necrosis at the tip of the leaflets, which can progress to the edges
- Dry green bluish leaves



















Quimifol Soybean Program Recommendations

Seed treatment	Pulverization - at 30/40 d.a.e. (V4)
Quimifol CoMo Plus 250 = 100 mL/ha	Quimifol Cerrado = 1.0 L/ha
(seed sufficient to 1 ha)	Niphokam 10-08-08 = 1.0 L/ha
Pulverization – buttoning (R1) Quimifol Florada = 2.0 L/ha Quimifol P30W = 2.0 L/ha	Pulverization – 'knife' (R4) Quimifol Florada = 2.0 L/ha Quimifol P30W = 2.0 L/ha Quimifol K40 = 2.0 kg/ha

Perform leaf analysis and consult Fênix Agro technical department for using one of the nutritional options of Quimifol line.

Quimifol K40 = 2.0 kg/ha

Soy	Classification of Foliar Content									
<i>ccy</i>	%									
NUTRIENTS	Low	Average	Suitable							
N	< 3,50	3,50 - 4,40	4,50 - 5,50							
Р	< 0,20	0,20 - 0,25	0,26 - 0,50							
K	< 1,20	1,20 - 1,60	1,70 - 2,50							
Са	< 0,70	0,70 - 0,90	1,00 - 2,00							
Mg	< 0,20	0,20 - 0,29	0,30 - 1,00							
S	< 0,15	0,15 - 0,19	0,20 - 0,30							
	mg/kg (ppm)									
В	< 10	10 - 19	20 - 55							
Cu	< 6	6 - 9	10 - 30							
Fe	< 30	30 - 49	50 - 350							
Mn	< 10	10 - 19	20 - 100							
Мо	< 0,20	0,20 - 0,40	0,50 - 0,60							
Zn	< 10	10 - 19	20 - 50							

Interpretation of analysis results on soybean crop leaf

Adaptation: Malavolta, 1992, ABC da Análise de Solo e Folhas.

Standard: end of flowering, 1st mature leaf from the tip of the branch without petiole (60 leaves).

Quimifol Products	N%	P ₂ O ₅ %	K%	Ca%	Mg%	S%	Zn%	B%	Mn%	Fe%	Cu%	Mo%	Co%
Quimifol CoMo Plus 250												17,5	1,0
Quimifol Soja Vigor												12,0	0,8
Quimifol Soja CoMo												15,0	1,0
Quimifol Cerrado					1,0	1,6	3,0	0,5	6,0		0,5	0,3	
Quimifol Arrank L						4,0	5,0	0,5	3,0		0,6		
Niphokam 10-08-08	10,0	8,0	8,0	1,0	0,5		1,0	0,5	0,5		0,2	0,1	
Quimifol P30W	1,0	30,0			1,5								
Quimifol Florada				9,0				1,0					
Quimifol Cálcio e Boro II				8,0				2,0					
Quimifol Mn 11									11,0				
Quimifol Mg-8					8,0								
Quimifol Znitro	10,0						15,0						
Quimifol Ferro						2,3	1,0			4,0			
Quimifol K40	10,0		40,0										
Quimifol K30	1,0		30,0										
Quimifol Boro L								10,0					
Quimifol Molibdênio 15												15,0	

