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## 5 **Abstract**

6 For many years the trichrome staining technique (TricrómicoWheatley) has been considered as  
7 the most important technique for the identification of the most common intestinal protozoa  
8 and popular in parasitology (1). Currently the most sensibilidad procedure for detecting and  
9 identifying protozoa trophozoites stool sample as it helps to easily highlight the morphology of  
10 amoebic cysts and trophozoites however, the procedure is complicated and tedious to perform  
11 and require at seven different reagents which is probably the most critical especially in  
12 laboratories with limited staff, this makes it complicated the routine use of this technique in  
13 most of the clinical laboratory, using koplinc additionally facilitates reagent contamination by  
14 repeated use.(4,5)

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16 **Index terms**— tricrómico wheatley, diagnosis of amoebae.

## 17 **1 Introduction**

18 The main purpose of this study was to evaluate a new method for obtaining atrichromic staining faster and effective  
19 for it used the same yes and procedure dimplementing two different technical koplinc one with and one with direct  
20 drops of reagent in the lamina.

21 Author: Bacteriologa, Universidad Colegio Mayor de Cundinamarca. Colombia, Afiliation: CMD SIPLAS.  
22 e-mail: daissyjasbeydi@gmail.com There were 20 positive smears all parasites and made several technical  
23 modifications in order to simplify and expedite the procedure equally maintaining the excellent staining qualities,  
24 the implemented the steps mentioned in the original technique and then the technique modified. ethanol should  
25 be as free of water as possible to avoid both the reactive evaporation of moisture absorption as that can prevent easy  
26 identification of the parasite. ( ??)

## 27 **2 Original Technical Steps**

## 28 **3 Wheatley's Modification of the Gomori**

29 Note: formalin fixed Fecal samples are suitable for this dyeing process

## 30 **4 a) Important considerations**

31 The fund continues to see green and cytoplasm of protozoa is stained a blue green and purple. There are nuclei  
32 with inclusions purple and intracellular structures are easy to distinguish as glycogen vacuoles are the Iodamoeba  
33 butschlii. ( ?? Kappa: the agreement between observers for the identification of parasitic forms, leukocytes,  
34 yeasts, and negative for them is 1.0, which shows diagnostic accuracy and level of agreement between observers for  
35 the samples with the latest changes made by SIPLAS medical laboratory, concluding that the changes mentioned  
36 here allow adequate identification of both parasite forms leukocytes, yeast and other fungal forms structures that  
37 allow the definition diagnosed patients, ensuring diagnostic accuracy versus the clinical definition kappa Degree  
38 of agreement < 0 without agreement 0 -0.

## 39 **5 Sensitivity and Specificity**

40 The sensitivity and specificity of the samples analyzed for fungal structures, yeast and parasitic leucocides is 100%,  
41 which shows that the stain can classify patients according to the positive or negative real state against its clinical  
42 definition

## 6 A) PARASITIC FORMS IDENTIFICATION WITH MODIFIED TECHNIQUE

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### 6 a) Parasitic forms identification with modified technique

Micrographs of amoebae obtained modified technique implemented <sup>1 2 3</sup>



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Figure 1: Figure 1 :

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Figure 2: Figure 2 :

**6 A) PARASITIC FORMS IDENTIFICATION WITH MODIFIED TECHNIQUE**

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Figure 3: Figure 3 :



Figure 4: Figure 4 :



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Figure 5: Figure 5 :Conclusions?

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Experimental development  
Validation of the art Stian Modified Trichrome in Cmd  
Siplas

Figure 6: Table 1 :

## 6 A) PARASITIC FORMS IDENTIFICATION WITH MODIFIED TECHNIQUE

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### DE

b) Kappa index leukocytes

TABLA DE 2\*2

Reference

OBSERVER 1 Reagent to validate Vp  
concordance No Reagent to validate FN

Reagent

in identification Vp+FN

OBSERVADOR 2 in identifying parasitic forms Sensitivity Specificity negative

f 1 k 1

$Vp/(Vp+FN)=True$

2 17 %Sensitivity ÍNDICE KAPPA VPP (%)

1 100,0

%Specificity VNP (%)

100,0

Total Positives

Volume TABLA DE 2\*2 Reference Reagent Reagent to validate Vp Vp+FN Sensitivity  $Vp/(Vp+FN)=True$

XIII

Issue

VII

Ver-  
sion

I

( ) K 2\*2 Reference Reagent ÍNDICE KAPPA Reagent to validate Vp VPP (%)

No refere

No Reagent to VNP (%) validate Total positives FN

Vp+FN Total Negatives

Sensitivity

$Vp/(Vp+FN)=True$  positives

Specificity

$VN/(VN+Fp)=True$  Negatives ÍNDICE KAPPA

Pe

Po

c)

Kappa

index

yeast

ÍNDICE KAPPA

OBSERVER 1

VPP (%)

100,0 concordance in

VNP (%)

6

100,0 identific

BSERVADOR positives Total Negatives Pe ÍNDICE KAPPA yeast 16 1 0,886 concordance in identifying par

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