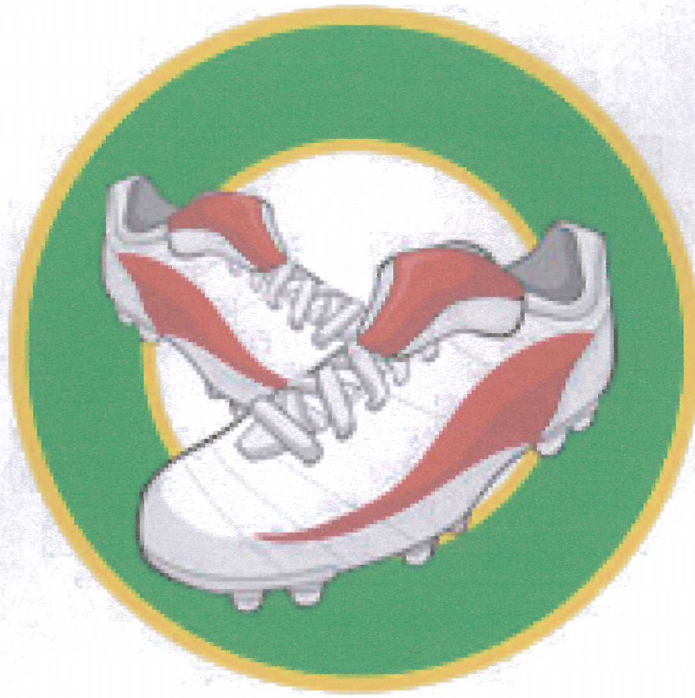


# Comparative Study of Soccer Cleats

## Final Report



Prepared for **XXXXXXXXXXXXXXX**

Prepared by **XXXXXXXXXX**

March 23, 2010

## Table of Contents

Glossary.....	3
Introduction.....	4
Criteria.....	5
Research Data.....	6-11
• Adidas Copa Mundial.....	6-7
• Adidas Predator Pulse TRX-FG.....	7-8
• Fila Presa.....	8
• Nike Air Zoom Total 90.....	9-10
• Nike Tiempo Ronalldhino.....	10-11
• PUMA v5.10 I-FG.....	11
Analysis of Data.....	12-19
• Comfort.....	12-13
• Durability.....	13-14
• Performance.....	14-15
• Price.....	15-16
• Size.....	16-17
• Traction.....	17-18
• Color.....	18-19
• Totals.....	19
Recommendation.....	20
Bibliography.....	21

## **Glossary**

**EVA:** A complex vinyl compound with filling, foaming, and bridging agents that is injected into the mold of the sole of a shoe for more cushion

**FG:** Firm ground

**I:** Injected. It means the space insole has been injected with a sort of therapeutic gel substance that slightly increases cushioning

**Insole:** The part of a shoe the sole of your foot contacts

**Instep:** Arched upper surface of the foot between the toes and the ankle

**Outsole:** The part of a shoe that contacts the ground when you walk

**Powerspine:** Technology used to re-enforce cleat structure to decrease bridging and to help keep the cleats shape

**Predator:** Patches or strips of rubber put on instep of cleat to improve friction between the foot and the ball

**TRX:** Traxion (outsole design on bottom of cleats that increases overall traction)



## Introduction

Antonio, you have hired me to find you the best possible cleats on the market. You told me that you will be playing for the University of North Carolina (one of the top ranked college men's soccer teams in the country) and that you need to have an excellent pair of cleats to help you do well.

You have played soccer for many years, but you were never the one who picked out your cleats. Your dad would take you to the athletic stores, choose a few pairs for you to try on, and ask you which ones fit. This is your first time buying high-end soccer cleats; so it's important to get it right the first time due to the cost. It's not impossible to find a good pair of cleats for a low price, but just remember the old saying, "You get what you pay for." Nevertheless, I will include some various lower-end and middle-end cleats to help compare.

Since this is your first time buying high-end cleats you obviously want them to be new, NOT USED. If at all possible you would also like the color of the cleats to match your new team's home jersey (baby blue). Not to mention they need to be the right size shoe for you. You are a small, but very quick, guy so it is important to get a good fit so as to not inhibit your speed.

With the cleats I recommend for you, it will be interesting to see how much you progress throughout your college soccer career. Hopefully, your skill will be observed by the right eyes; providing you with a fresh start into the world of MLS. To help you progress in your college career, I have chosen the following cleats to research:

- ❖ Adidas Copa Mundial (Edison Arantes do Nascimento, better known as Pele)
- ❖ Adidas Predator Pulse TRX-FG (David Beckham)
- ❖ Fila Presa
- ❖ Nike Air Zoom Total 90 (Me)
- ❖ Nike Tiempo Ronalldhino (Ronaldo de Assis Moreira, better known as Ronaldinho)
- ❖ PUMA v5.10 I-FG



## Criteria

Together, we decided upon what attributes are the most valuable in a pair of soccer cleats. These attributes provided the criteria for which I created the list below. I will use these criteria to form a recommendation as to which pair of cleats I think you should purchase. The criteria we chose are as follows:

- ❖ Comfort
- ❖ Durability
- ❖ Performance
- ❖ Price
- ❖ Size (US: 9)
- ❖ Traction

I will also consider one non-essential, yet highly desired criteria in my report:

- ❖ Color (preferably baby blue)

This report includes the research data I have obtained for each of the six pairs of cleats based on our criteria.

## Research Data



### Adidas Copa Mundial

#### Comfort

The body of this cleat is constructed of kangaroo leather with a foam insole. The outsole of the cleat is direct-injected, which provides optimized fit and comfort. Customer reviews from [www.reviewcentre.com](http://www.reviewcentre.com) give the Copa Mundial 4.9 out of 5 stars for comfort.

#### Durability

Durable FG (firm ground) outsole, which specializes on firm, natural surfaces. Kangaroo leather body provides enhanced durability. Online customer reviews generally give Copa Mundial a high rating for durability in all weather conditions.

#### Performance

I did not find any listed performance enhancements on this pair of cleats. Although, customer reviews point out that performance is not hindered from switching to this cleat from other high end cleats, like the Predator Pulse or Nike Tiempo.

#### Price

Adidas' official website lists this pair at about \$110. On Amazon.com they can be found in new condition anywhere from \$84.99 to \$109.99.

#### Size

On both Adidas' official website and Amazon.com it allows you to select the shoe size, including size 9, that you wish to buy.

### Traction

These cleats have moulded studs, which protrude directly from the outsole of the cleat in a conical shape; rather than having detachable studs that you can switch out for studs that are better for different surfaces. Moulded studs provide great all around traction, as customer reviews reflect.

### Color

Unfortunately this particular pair of cleats is not available in baby blue, only black and white.

## Adidas Predator Pulse TRX-FG

### Comfort

These cleats are produced with Taurus leather for a soft feel. Also has synthetic lining for comfort, along with injected EVA midsole for light cushioning.

### Durability

The Taurus leather used in these cleats is very durable, along with the synthetic lining. Customer reviews point out that these cleats last season after season.

### Performance

Predator technology re-distributes weight to forefoot providing maximum striking power. Powerspine technology helps to prevent injury with increased rigidity.

### Price

Adidas' official website lists this pair of cleats at \$220. On Amazon.com they can be found in new condition at \$169.99.

### Size

This pair of cleats is only available in size 13 on Amazon.com; although, on Adidas's official website they can be purchased in sizes 6.5 to 13.5.

### Traction

TRX-FG (Traxion, firm ground) technology provides enhanced grip and comfort on firm, natural surfaces. They standard studs for these cleats are conical moulded.



## Color

Although this pair of cleats is offered in many different colors it is not available in baby blue.

## Fila Presa

### Comfort

This pair of cleats is made from synthetic leather. Neither Fila's official website nor Amazon.com provides information on features that improve the comfort of the cleats. Nor are there any customer reviews online to give any information about how comfortable the cleats are. My experience with synthetic leather tells me that this pair of cleats will more than likely be fairly abrasive on the foot.

### Durability

The outsole is cemented and riveted to the upper, encasing part of the cleat for improved durability. Synthetic leather, which decreases comfort, is a very durable material that takes a lot of abuse.

### Performance

These cleats have a new, synthetic ribbed upper material for increased grip on the ball. Also has stability inserts which helps to prevent rolling of the ankles.

### Price

On Fila's official website, these cleats can be purchased at \$45. But, on Amazon.com they can be found for nearly half the price, in new condition, from \$23.07 to \$24.21.

### Size

Amazon.com offers these cleats in size 9, but Fila's official website only has them available in size 1.5.

### Traction

Outsole moulded conical studs give these cleats great all around traction on multiple surfaces.

### Color

The primary color of these cleats is black with the option of choosing a red, silver, or dark blue accent coloring on Amazon.com. Fila.com offers the red and blue accents only.

## Nike Air Zoom Total 90

### Comfort

These cleats are made from synthetic leather. Since I have had personal experience with these cleats I know that these cleats are not particularly comfortable. This material has the tendency to wear down your socks and the insole of the cleats wore all the way down to the outsole within the two years I used them.

### Durability

Like the Fila Presa, the synthetic leather these cleats are made of is very durable; although, I wore these cleats for two years and the seam between the outsole and the upper casing started to pull apart. For that front seem to begin to break apart within two years isn't horrible, but it isn't impressive either. What else that didn't impress me with these cleats was the heel of the insole was worn completely down to the outsole in a little over a year of use.

### Performance

When I first started using these cleats I experienced an increase in my accuracy and power in shooting the ball. The hard, non-giving synthetic leather accounts for the increase in power and the flat surface that resulted from the laces being placed on the side of the cleat accounted for the increase in accuracy.

### Price

The Nike Air Zoom Total 90 cleats are no longer listed on Nike's official website. Instead, they have created a line of Nike T90 (Total 90) models that have essentially been upgraded from the Air Zoom Total 90's; these cleats range in price from \$52 to \$235. The original Air Zoom Total 90 cleats can be found on Amazon.com for about \$149.99.

### Size

The original Air Zoom Total 90's found on Amazon.com are only available in size 8.5, which is a possibility; although they will be considered a gamble as to whether or not they will fit. The upgraded versions of these cleats, however, are available in multiple sizes, including 9, on Nike's official website.

### Traction

The oval shaped moulded studs of these cleats improved lateral traction, which improves pivoting side to side. The moulded studs provide great traction on all surfaces.



## Color

The size 8.5 cleats found on Amazon.com are only available in a graphite color, whereas on Nike.com you can get your desired baby blue coloring with NikeiD. NikeiD is an application within Nike's online store that lets you customize the color, shape, and materials of your cleats.

## Nike Tiempo Ronalrhino

### Comfort

Like the Adidas Copa Mundial, these cleats are made from kangaroo leather. The form-fit heel contours the shape of the heel for increased comfort. Poron foam is incorporated throughout the inner surface for extra comfort.

### Durability

Like the Adidas Copa Mundial's, the kangaroo leather in these cleats is very durable and customer reviews support this as well. On Nike's official website these cleats were rated at the highest level in durability.

### Performance

Kangaroo leather offers better control when striking the ball. Also, better comfort equals better performance due to the lack of pain from handling the ball.

### Price

These cleats are priced anywhere from \$150 to \$170 on Nike's official website. But, they can be found on Amazon.com from \$79.99 to \$92.95.

### Size

On both Nike's official website and Amazon.com these cleats are offered in size 9.

### Traction

You can get these cleats with either plain moulded studs or detachable studs. With detachable studs you can get more traction out of your cleats with different attachments attached for different surfaces.



## Color

Amazon.com doesn't offer this pair of cleats in baby blue; although, like the Nike Total 90's, these cleats can be customized with NikeiD.

## PUMA v5.10 I-FG

### Comfort

These cleats are composed of synthetic leather and on the back inner surface has a soft textile material that increases comfort.

### Durability

Like the Air Zoom Total 90, the synthetic leather in these cleats is very durable and long-lasting.

### Performance

Synthetic leather doesn't have much give to it, as a result there's more force behind every kick. But, with less cushioning there is less comfort.

### Price

Puma.com has this pair of cleats listed at \$50 even. Also, they can be found on Amazon.com from \$36.62 to \$54.44.

### Size

Amazon.com has these cleats in size 9, but Puma's official website does not.

### Traction

Like the Air Zoom Total 90, these cleats are made with oval shaped moulded studs, which are great for pivoting and most surfaces. But, they specialize on firm, natural surfaces.

### Color

Neither Puma's official website nor Amazon.com has these cleats in baby blue.

## Analysis of Data

### Comfort

**Nike Tiempo Ronaldhino** I deemed to be the most comfortable pair of cleats because of the kangaroo leather, the form-fit heel, and the Poron incorporated inner surface.

**Adidas Copa Mundial** I deemed to be the second most comfortable because of the kangaroo leather, the direct-injected outsole, and the exceptional comfort ratings from customer reviews.

**Adidas Predator Pulse TRX-FG** I deemed the third most comfortable because of the Taurus leather and the EVA injected midsole.

**PUMA v5.10 I-FG** I deemed the fourth most comfortable because of the synthetic leather material, the soft textile material on the back heel, and the injected insole.

**Nike Air Zoom Total 90** I deemed the fifth most comfortable because of the synthetic leather and from personal experience with these cleats.

**Fila Presa** I deemed the least comfortable because of the synthetic leather material, the low price = low quality stereotype, and the lack of information available on the comfort of these cleats.

Ranking	Cleats	Points (out of 10)
1	Nike Tiempo Ronaldhino	10
2	Adidas Copa Mundial	9.5
3	Adidas Predator Pulse TRX-FG	8
4	PUMA v5.10 I-FG	7



5	Nike Air Zoom Total 90	6
6	Fila Presa	5

### Durability

**Adidas Predator Pulse TRX-FG** I rated to as the most durable because of the durable Taurus leather and the re-enforcing synthetic leather lining.

**Nike Tiempo Ronalldhino** I rated to as the second most durable because of the kangaroo leather; these cleats received a 4.5 out of 5 rating in durability on Nike's official website.

**Adidas Copa Mundial** I rated as the third most durable because of the kangaroo leather the firm outsole built for tough ground.

**Fila Presa** I rated as the fourth most durable of the synthetic leather material and re-enforced seam between the outsole and upper casing.

**Nike Air Zoom Total 90** I rated as the fifth most durable because of the synthetic material and my personal experience with these cleats.

**PUMA v5.10 I-FG** I rated as the least durable because all I could find out about them is that they are made from synthetic leather.

Ranking	Cleats	Points (out of 10)
1	Adidas Predator Pulse TRX-FG	10
2	Nike Tiempo Ronalldhino	9
3	Adidas Copa Mundial	8.5
4	Fila Presa	8



5	Nike Air Zoom Total 90	7
6	PUMA v5.10 I-FG	6.5

## Performance

**Adidas Predator Pulse TRX-FG** cleats are rated the best performers because of the Predator and Powerspine technologies, which increase performance and help prevent injury.

**Adidas Copa Mundial** cleats are rated second best because of the customer reviews which rival them even to the Adidas Predator and Nike Tiempo and the material's comfort level, which reduces pain.

**Nike Tiempo Ronalrhino** cleats are rated fourth best because of, like the Copa Mundials, the superior comfort equals less pain; therefore, it's easier to perform.

**Nike Air Zoom Total 90** cleats are rated third because of the synthetic leather material and from the increase in power and accuracy when I used these cleats.

**Fila Presa** cleats are ranked fifth because of the synthetic ribbed upper material and stability inserts, which improves grip on the ball and helps prevent injury.

**PUMA v5.10 I-FG** cleats are ranked last because of the synthetic leather material, which has less give so it has more power.

Ranking	Cleats	Points (out of 10)
1	Adidas Predator Pulse TRX-FG	10
2	Adidas Copa Mundial	9.5
3	Nike Tiempo Ronalrhino	8.5

4	Nike Air Zoom Total 90	7.5
5	Fila Presa	7
6	PUMA v5.10 I-FG	6

## Price

**Fila Presa** cleats are the first choice with the lowest found price of \$23.07 on Amazon.com. Fila.com didn't have these cleats in size 9, but that doesn't matter because Fila's price was higher than Amazon's.

**PUMA v5.10 I-FG** cleats are the second choice with a lowest price of \$36.62 on Amazon.com. Puma.com didn't have these cleats in size 9, but Amazon had the better price over Puma, so it doesn't matter.

**Nike Tiempo Ronaldhino** cleats are the third choice with a lowest price of \$79.99 on Amazon.com.

**Adidas Copa Mundial** cleats are the fourth choice with a lowest price of \$84.99 on Amazon.com.

**Nike Air Zoom Total 90** cleats are the fifth choice with a lowest price of \$149.99 on Amazon.com. The original Air Zoom Total 90's were only available in a size 8.5 and will be considered a gamble if purchased.

**Adidas Predator Pulse TRX-FG** cleats had a lowest of \$169.99 on Amazon.com; although, were not available in size 9. These cleats are the sixth choice with a lowest compatible price of \$220 on Adidas.com.

Ranking	Cleats	Lowest Price	Points (out of 5)
1	Fila Presa	\$23.07	5



2	PUMA v5.10 I-FG	\$36.62	4
3	Nike Tiempo Ronalldhino	\$79.99	3
4	Adidas Copa Mundial	\$84.99	2.5
5	Nike Air Zoom Total 90	\$149.99	1.5
6	Adidas Predator Pulse TRX-FG	\$220	.5

### Size

**Adidas Copa Mundial** cleats are rated first because they are available in size 9.

**Fila Presa** cleats are rated first because they are available in size 9.

**Nike Tiempo Ronalldhino** cleats are rated first because they are available in size 9.

**PUMA v5.10 I-FG** cleats are rated first because they are available in size 9.

**Adidas Predator Pulse TRX-FG** cleats are rated second because only the higher priced seller had these cleats available in size 9.

**Nike Air Zoom Total 90** cleats are rated third because I could only find them in size 8.5.

Ranking	Cleats	Lowest Available Price	Points (out of 5)
1	Adidas Copa Mundial	Yes	5
1	Fila Presa	Yes	5



1	Nike Tiempo Ronaldhino	Yes	5
1	PUMA v5.10 I-FG	Yes	5
2	Adidas Predator Pulse TRX-FG	No	3
3	Nike Air Zoom Total 90	Yes	2 (only available size is 8.5)

### Traction

**Nike Tiempo Ronaldhino** cleats I rated first because of the option to get detachable studs; different studs specialize on different surfaces. Otherwise, they come with conical moulded studs.

**Adidas Predator Pulse TRX-FG** cleats I rated second because of the conical moulded studs and the Traxion technology built into them.

**Nike Air Zoom Total 90** cleats I rated third because of the oval shaped moulded studs and from my personal experience with them.

**PUMA v5.10 I-FG** cleats I rated third also because of the oval moulded studs.

**Adidas Copa Mundial** cleats I rated fourth because of the conical moulded studs.

**Fila Presa** cleats I rated fourth also because of the conical moulded studs.

Ranking	Cleats	Points (out of 10)
1	Nike Tiempo Ronaldhino	10
2	Adidas Predator Pulse TRX-FG	9

3	Nike Air Zoom Total 90	8
4	PUMA v5.10 I-FG	8
5	Adidas Copa Mundial	7
6	Fila Presa	7

### Color

**Nike Tiempo Ronaldhino** cleats are ranked first because their color is customizable with NikeiD; although, the least expensive of these cleats are not available in baby blue.

**Adidas Copa Mundial** cleats are ranked third because they are not available in baby blue, but they are in black and white, which goes well with any other color.

**Adidas Predator Pulse TRX-FG** cleats are ranked fourth because they are not available in baby blue, but they are available in other bright colors, which could go well with baby blue.

**Nike Air Zoom Total 90** cleats are ranked second because the upgraded versions of these cleats are also customizable with NikeiD, but the original version is not available in baby blue.

**PUMA v5.10 I-FG** cleats are ranked fifth because they are not available in baby blue, but they are avail in other colors that may go well with baby blue.

**Fila Presa** cleats are ranked last because they are not available in baby blue; only black with color accents that don't go well with baby blue.

Ranking	Cleats	Points (out of 5)
1	Nike Tiempo Ronaldhino	5



<b>2</b>	Adidas Copa Mundial	4
<b>3</b>	Adidas Predator Pulse TRX-FG	3.5
<b>4</b>	Nike Air Zoom Total 90	3
<b>5</b>	PUMA v5.10 I-FG	2.5
<b>6</b>	Fila Presa	1.5

### Totals

<b>Cleats →</b>	<b>Adidas Copa Mundial</b>	<b>Adidas Predator Pulse TRX-FG</b>	<b>Fila Presa</b>	<b>Nike Air Zoom Total 90</b>	<b>Nike Tiempo Ronaldhino</b>	<b>PUMA v5.10 I- FG</b>
<b>Comfort</b>	9.5	8	5	6	10	7
<b>Durability</b>	8.5	10	8	7	9	6.5
<b>Performance</b>	9.5	10	7	7.5	8.5	6
<b>Price</b>	2.5	.5	5	1.5	3	4
<b>Size</b>	5	3	5	2	5	5
<b>Traction</b>	7	9	7	8	10	8
<b>Color</b>	4	3.5	1.5	3	5	2.5
<b>Total (out of 55)</b>	<b>46</b>	<b>44</b>	<b>38.5</b>	<b>35</b>	<b>50.5</b>	<b>39</b>



## Recommendation

Coming in first place, the **Nike Tiempo Ronaldhino's** are the best cleats for you to purchase according to the points system. They received top marks in the Comfort, Size, Traction, and Color categories and are by no means meager in any other category.

The **Adidas Copa Mundial** cleats placed second with minor reductions in nearly all categories, but these cleats are by no means mediocre. They would serve you very well in your college career if you were to purchase them.

The **Adidas Predator Pulse TRX-FG's** came in third place; being the most expensive cleats at \$220, they did not fare well in the Price category. If the lower priced seller of these cleats had them in size 9, these cleats would've hands down been my sole recommendation.

In fourth place were the **PUMA v5.10 I-FG** cleats. With less than average ratings in Durability and Performance, along with just average ratings in Comfort and Traction, these cleats are for the average soccer player, not someone of your talents.

In fifth place are the **Fila Presa** soccer cleats. With the worst Comfort rating and average Durability and Performance these cleats deserve to be in fifth place.

And last but not least are my cleats, the **Nike Air Zoom Total 90's**. I admit I was surprised that the other cleats were found to be so much better than my own cleats. I believe my cleats would've fared better had I found them in size 9 or at a lower price. My cleats' rating just goes to prove how high-end some of these other cleats are.

My first recommendation is the **Adidas Predator Pulse TRX-FG's**. The only significant downside to these cleats is their price at \$220. There is no question these cleats are of the highest quality with stupendous ratings in Durability, Performance, and Traction. If you can deal with these cleats not being in your color and their high price than you should definitely at least try them out.

My second recommendation is the **Adidas Copa Mundial's**. With the highest Comfort and Performance average, these cleats would work great for you. Their only average ratings are in Durability and Traction. Seeing as how these cleats are a mere \$84.99 compared to the Predator's, you'll definitely get your money's worth, even if you need to replace them every two to four years. Also, college soccer fields are mostly all turf, so there won't be much occasion for you to have stupendous traction on different surfaces since most college fields are the same type of surface.



## Bibliography

- adidas*. adidas America Inc, 2010. Web. 25 January 2010. [<http://www.shopadidas.com/>]
- Amazon*. Amazon.com Inc, 1996. Web. 16 January 2010. [<http://www.amazon.com/>]
- FILA*. FILA Online, Inc, 2010. Web. 25 January 2010. [<http://shop.fila.com/>]
- NIKE*. NIKE, Inc, 2009. Web. 30 January 2010. [<http://www.nike.com>]
- PUMA*. PUMA AG, 2009. Web. 30 January 2010. [<http://www.puma.com>]
- "The History of Soccer". *Soccer-For-Parents*. 2003. Web. 16 January 2010. [<http://www.soccer-for-parents.com/history-of-soccer.html>]
- review centre. Review Centre 2010, 1999. Web. 21 February 2010. [<http://www.reviewcentre.com>]