

In the first line of the abstract the author say: the aim of this study was to evaluate the effect of the application of different plant growth regulators; however, the author must know that the application is the action (grab and put the regulators of growth on the plant), but by itself the action does not cause any effect, who induces it is the growth regulator; so, from my point of view, the author must say it in another way, for example, **the aim of this research was to evaluate the effect that cause the plant growth regulators.....**

In the third paragraph of the abstract is said:

The experiment was carried out ~~in~~the agricultural ~~years~~ of 2012/2013 and 2013/2014 in a commercial orchard located in the municipality of Morro Redondo, RS, Brazil.

I suggest that the phrase be: The experiment was carried out **during the agricultural cycles** of 2012/2013 and 2013/2014 in a commercial orchard located in the municipality of Morro Redondo, RS, Brazil. Because the year is 2012, 2013, etc.

In the four paragraph of the abstract is said:

Plant regulators were applied in both ~~years~~ as follows: Promalin® was sprayed with 80 % of opened flowers at doses of 0.5, 1.0, 1.5 and 2.0 mL L⁻¹; NAA and BA were sprayed in fruits with 5-7 mm diameter, at doses of 5, 10 and 15 mg L⁻¹ and 50, 75, 100 and 125 mg L⁻¹, respectively, and manual thinning was performed after full bloom.

I suggest that the phrase be: Plant regulators were applied in both **cycles** as follows: Promalin® was sprayed with 80 % of opened flowers at doses of 0.5, 1.0, 1.5 and 2.0 mL L⁻¹; NAA and BA were sprayed in fruits with 5-7 mm diameter, at doses of 5, 10 and 15 mg L⁻¹ and 50, 75, 100 and 125 mg L⁻¹, respectively, and manual thinning was performed after full bloom.

In the five paragraph of the abstract is said:

Number of fruit per plant, density of fruits by the trunk cross-sectional, yield per plant and the return of bloom in the second cycle were evaluated in the field. Pulp firmness, total soluble solids, fruit diameter, fruit length and mean fruit mass were evaluated at Laboratório de Agronomia (LabAgro), Universidade Federal de Pelotas. **Promalin® at different concentrations, showed** results statistically similar to the manual thinning, being an alternative as moderated thinning.

I suggest that the phrases be: Number of fruit per plant, density of fruits by the trunk cross-sectional **area**, yield per plant and the return of bloom in the second cycle were evaluated in the field. Pulp firmness, total soluble solids, fruit diameter, fruit length and mean fruit mass were evaluated at Laboratório de Agronomia (LabAgro), Universidade Federal de Pelotas. **With Promalin® at different concentrations, the results were** statistically similar to the manual thinning, **so this procedure can be other alternative for thinning.**

In the six paragraph of the abstract is said:

The plant growth regulator NAA reduced the harvest load, but ~~had~~ a negative response resulting in the formation of **pygmy fruits**. The BA-based treatments were ~~the most efficient as they reduced harvest load, and increased~~ fruit size and flowering return.

I suggest that the phrases be: The plant growth regulator NAA reduced the harvest load, but **caused** a negative response and the plants formatted of **pygmy fruits**. The BA-based treatments were **more efficacy for reduce fruits load, increased fruit size and accelerated the flowering return.**

Since the author must be clear about the concept harvest. Because the harvest is the action and those is not a load for the plants. In addition, in no table or figure mention fruits pygmy, as to facilitate review by the reviewer.

In introduction is said:

Thinning is an important cultural practice which influences fruit ~~productivity~~ and quality. Fruit tree thinning is justified by two main reasons, according to physiological aspects of the plant: to reduce the risks of alternation of production, common in the following cycle in years of excessive load in which the plants were not thinned or the process was inadequately; and to have fruits with increased quality (bigger, more colorful, higher sugar content and more ~~aromatic~~) [1].

Suggestion: ~~Productivity is equals profit, and production refers to the total of products (fruits) in the plants,~~ therefore the word productivity must be replaced by production.

In the last paragraph of the introduction is said:

Naphthaleneacetic acid (NAA), carbaryl and, more recently, 6-benzyladenine (BA) are among the chemical thinners used in apple tree culture [4, 5]. Another product also used is Promalin® formed by the mixture of two natural plant growth regulators, cytokine 6-BA (benzyladenine) and gibberellins GA4 + 7 [6]. The aim of this study was to evaluate the effect of the plant growth regulators naphthaleneacetic acid (NAA), 6-benzyladenine (BA) and Promalin® (6-benzyladenine (BA) + gibberellins GA4 + 7) on chemical thinning and return bloom of Eva apple trees.

Suggestion: Naphthaleneacetic acid (NAA), carbaryl and, more recently, 6-benzyladenine (BA) are among the chemical thinners used in apple tree culture [4, 5]. Another product also used is Promalin® formed by the mixture of two natural plant growth regulators, cytokine 6-BA (benzyladenine) and gibberellins GA4 + 7 [6]. The aim of this ~~research~~ was to evaluate the effect ~~that cause~~ the plant growth regulators: naphthaleneacetic acid (NAA), 6-benzyladenine (BA) and Promalin® (6-benzyladenine (BA) + gibberellins GA4 + 7) ~~in fruits thinning and in the return of bloom~~ of 'Eva' apple trees.

The authors should review the concepts of cause and effect, so that they are more clear why the suggestion.

In the first paragraph of the materials and methods section it is said:

The study was performed ~~in two~~ agricultural cycles 2012/2013 and 2013/2014 in a commercial orchard located in Morro Redondo municipality, RS, Brasil (31° 40' 60" South and 52° 34' 50" West). Seven years old Eva apple trees, grafted on a Marubakaido rootstock and conducted in the central leader system with a density of 2500 ha⁻¹ plants were evaluated.

Suggestion: The study was performed ~~during the~~ agricultural cycles 2012/2013 and 2013/2014 in a commercial orchard located in Morro Redondo municipality, RS, Brasil (31° 40' 60" South and 52° 34' 50" West). Seven years old apple trees of the ~~cultivar~~ 'Eva', grafted on the rootstock 'Marubakaido' and conducted in the central leader system with a density of 2500 ~~plants ha⁻¹ were~~ used.

Suggestion for the presentation of treatments:

~~Table 1. Treatments and doses used in apple orchards during the agricultural cycles 2012-2013 and 2013-2014.~~

Treatments	Doses	Treatments	Doses
Control (manual thinning)	-----	NAA	15 mg L ⁻¹
Promalin®	1.25 ml L ⁻¹	NAA	20 mg L ⁻¹
Promalin®	1.50 ml L ⁻¹	BA	50 mg L ⁻¹
Promalin®	1.75 ml L ⁻¹	BA	75 mg L ⁻¹
Promalin®	2.00 ml L ⁻¹	BA	100 mg L ⁻¹
NAA	5 mg L ⁻¹	BA	125 mg L ⁻¹
NAA	10 mg L ⁻¹	-----	-----

In Results and Discussion it is said:

A significant influence was observed for the number of fruits per plant for the 2012/2013 84 harvesting when comparing the chemical treatments with the manual thinning (mean value 85 82.75 fruits per plant). Treatments with Promalin® were not statistically different from each 86 other and from the manual thinning. A significant reduction on fruits per plant was observed for the NAA 15 mg L⁻¹ 87 (mean value 51.25 fruits per plant) comparatively to the manual 88 thinning. Treatments with BA resulted in reduced number of fruits per plant as well, with mean values of 40.50, 50.25 and 43.75 fruits per plant for dosages of 50, 100 and 125 mg L⁻¹ 89 1 90 , respectively, with consequent lower harvest load (Table 1).

Suggestion: A significant influence was observed for the number of fruits per plant for the **cicle** 2012/2013 harvesting when comparing the chemical treatments with the manual thinning (**82.75**). Treatments with Promalin® were not statistically different from each other and from the manual thinning. A significant reduction on fruits per plant was observed with NAA 15 mg L⁻¹ (**51.25**) comparatively to the manual thinning. Treatments with BA **also** reduced number of fruits per plant (**40.50, 50.25 and 43.75**) for dosages of 50, 100 and 125 mg L⁻¹, respectively, with consequent lower fruits load (Table 1).

In the second paragraph is said: Results obtained by [5], where BA was applied at 120 mg L⁻¹ 91 in Fuji Suprema fruits (5 to 8 92 mm diameter), also showed a significant reduction on number of fruits per plant comparatively to the manual thinning. In addition, [7] also reported a reduction on the number of fruits per plant in Summerred cultivar treated with BA and NAA. The application of BA increases the competition for carbohydrates between larger fruits in relation to smaller fruits, reducing the number of fruits per plant [8]. The mechanism of action of BA in respect to apple thinning is still theme of discussion on the literature; one of the evidences is the action of BA on the reduction of polar transport of indolacetic acid, resulting in an increase on cells sensibility in the ethylene abscission area [9, 10, 11].

Suggestion: Results obtained by [5], where BA was applied at 120 mg L⁻¹ in **'Fuji Suprema' fruits with 5 to 8.92 mm diameter**, also showed a significant reduction on number of fruits per plant comparatively to the manual thinning. In addition, [7] also reported a reduction on the number of fruits per plant in **'Summerred'** cultivar treated with BA and NAA. The application of BA increases the competition for carbohydrates between larger fruits in relation to smaller fruits, reducing the number of fruits per plant [8]. The mechanism of action of BA in respect to apple thinning is still theme of discussion on the literature; one of the evidences is the action of BA on the reduction of polar transport of indolacetic acid, resulting in an increase on cells sensibility in the ethylene abscission area [9, 10, 11]. **In addition to, I suggest using the apostrophe to highlight the name of the cultivars.**

In the third paragraph is said: A similar behavior was observed for manual thinning and treatments with Promalin® in respect to the number of fruits for the TCSA, both treatments showing the highest values. Nevertheless, treatments with NAA and BA showed a significant decrease on this parameter compared to manual thinning, as well as a reduction on the number of fruits per plant.

Suggestion: A similar behavior was observed **with** manual thinning and treatments with Promalin® in respect to the number of fruits for the TCSA, both treatments **caused** the highest values. Nevertheless, treatments with NAA and BA **induced** a significant decrease on this parameter and a reduction on the number of fruits per plant compared to manual thinning.

The authors should be clear that the treatments do not produce fruits, and that it is the plants that produce them as a response or effect to the treatments or growth regulators. Because when they say that the treatments showed the least number of fruits per plant, that's not true, because I am sure they have never seen a growth regulator produce apples.

In the four paragraph is said: Regarding pulp firmness, the manual thinning showed the lowest value (59.21N) and BA 100 mg L⁻¹ (73.16N) the highest value (Table 1). The application of BA is responsible for the increase of fruit size and also for pulp firmness, as these parameters are related with cell.

Suggestion: Regarding pulp firmness (Table 1), **with** the manual thinning **was obtained the lowest mean** (59.21N) and **with the dose of BA 100 mg L⁻¹ the highest average** (73.16N). The BA was the that **caused increase of fruit size and also the highest pulp firmness, perhaps because the first parameter is related to the number and size of cells, and the second (pulp firmness) with the cell wall.**

Authors should know that they should not speak in the present tense, because the research is finished. Is he still doing the same experiment and research, truth that not? That is why you should say it in the past tense!

Tables should be made only with three main lines, such as the following:

Table 2.

Treatments	Number of fruits plant ⁻¹	Fruits cm ⁻² TCSA	Yield plant ⁻¹ (kg)	Mean fruit mass (g)	PF (N)
Control (manual thinning)	82.75 ac	7.51 a	13.41 a	162.20 a	59.21 b
Promalin® (1.25 ml L ⁻¹)	82.00 ac	7.69 a	10.04 a	122.50 ef	67.97ab
Promalin® (1.50 ml L ⁻¹)	83.50 ac	7.68 a	11.14 a	133.50 cd	71.93 ab
Promalin® (1.75 ml L ⁻¹)	91.25 ab	8.27 a	12.13 ab	133.12 c	69.20 ab
Promalin® (2.00 ml L ⁻¹)	96.25 a	7.93 a	12.51 ab	130.00 c	70.77 ab

NAA (5 mg L ⁻¹)	55.75 cd	4.54 b	7.56 ce	135.72 cd	65.66 ab
NAA (10 mg L ⁻¹)	66.5 ad	5.42 ab	8.88 be	133.75 cd	66.31 ab
NAA (15 mg L ⁻¹)	51.25 d	5.47 ab	5.94 de	115.95 f	68.09 ab
NAA (20 mg L ⁻¹)	56.25 cd	4.40 b	7.19 ce	127.92 de	61.15 ab
BA (50 mg L ⁻¹)	40.50 d	3.76 b	5.44 e	134.25 cd	68.20 ab
BA (75 mg L ⁻¹)	61.75 bd	5.50 ab	8.55 be	138.75 c	71.82 ab
BA (100 mg L ⁻¹)	50.25 d	4.49 b	7.45 ce	147.75 b	73.16 a
BA (125 mg L ⁻¹)	43.75 d	4.01 b	6.99 ce	160.50 a	71.83 ab
CV	17.98	19.94	18.78	3.15	7.92

The figure that appears in the manuscript is written in another language in the exe x and in the y, and the author have to correct.

Suggestion of title for the figure:

Figure 1. Return flowering index for different thinning treatments for the second experiment (cycle 2013-2014).

Means followed by the same letter do not differ from each other, by Tukey test, at 5% probability ($p < 0.05$).

~~T1 (Manual thinning); T2 (Promalin® 1.25 ml L⁻¹); T3 (Promalin® 1.5 ml L⁻¹); T4 (Promalin® 1.75 ml L⁻¹); T5 (Promalin® 2.0 ml L⁻¹ 243); T6 (NAA 5 mg L⁻¹); T7 (NAA 10 mg L⁻¹); T8 (NAA 15 mg L⁻¹); T9 (NAA 20 mg L⁻¹ 244); T10 (BA 50 mg L⁻¹); T11 (BA 75 mg L⁻¹); T12 (BA 100 mg L⁻¹) e T13 (BA 125 mg L⁻¹ 245).~~

The abbreviations T1, T2, T3, etc., are in excess in the materials and methods section, in the tables and in the figure, so the authors must eliminate them, as indicated in the proposed tables.

The general averages indicated in the tables do not mean anything for the purpose of the research, for which the authors must eliminate them, As I indicated in table 2 that I propose.

The rest of the text of results and discussion that does not appear with suggestions for correction, the authors should review and adapt it, based on the proposals that I have now made.

In Conclusions is said: Overall, results obtained with Promalin® were similar to those of manual thinning. A negative effect was obtained for Eva cultivar when using NAA with the formation of pygmy fruits, in addition to low production per plant and poor flowering return. BA was the plant growth regulator with best results, as it increased the mean fruit mass and revealed the highest flowering return index, but with lower fruit load per plant.

Suggestion: Overall, results obtained with Promalin® were similar to those that observed where manual thinning was practiced. When used NAA a negative effect was obtained with the formation

of small fruits, in addition to low production per plant and poor flowering return. The BA was the that caused the best results in the mean fruit mass and on highest index of the flowering return, but with lower fruit load per plant. Then the use of Promalin® also can be other alternative for fruits thinning.