

PATENT SPECIFICATION

814,947



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COMPLETE SPECIFICATION

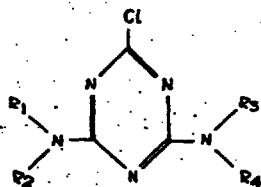
Improvements in and relating to Plant Growth Influencing Compositions



We, J. R. GEIGY A.-G., a body corporate organised according to the laws of Switzerland of 215, Schwarzwaldallee, Basle, Switzerland, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The present invention is concerned with new compositions for influencing, and more particularly, inhibiting the growth of plants and with methods of applying these compositions for influencing the growth of plants.

The surprising observation has been made that diamino - chloro - s - triazines of the general formula



wherein R₁, R₂ and R₃ represent hydrogen, alkyl, alkenyl, hydroxyalkyl, aralkyl or cycloalkyl radicals, and R₄ represents alkyl, alkenyl, hydroxyalkyl, aralkyl or cycloalkyl radicals, whilst R₄ can be bound to R₂ or R₃ to R₁, either direct or by way of an oxygen atom, have an inhibitory influence on the growth of plants, or may even have a lethal action, even in very low concentrations.

According to the present invention therefore compositions for influencing the growth of plants, especially for killing weeds, are provided comprising an s - triazine derivative of the above general formula and, as a carrier,

- (a) a water-insoluble pulverulent solid, or
- (b) an organic solvent boiling above 150° C., or
- (c) an emulsifying agent with a water - in-

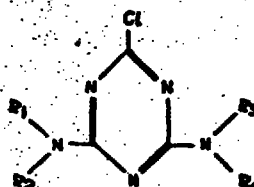
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soluble pulverulent solid or an organic solvent.

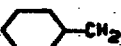
The preferred s-triazine derivatives are those in which R₁, R₂ and R₃ represent hydrogen, alkyl radicals, having at most three carbon atoms; or alkenyl radicals having at most three carbon atoms, and R₄ represents an alkyl radical having at most three carbon atoms or an alkenyl radical having at most three carbon atoms.

Compounds of the formula defined above are excellently suitable as active ingredients for weed killers, both for the killing of weeds among cultivated plants (selective herbicides) and for the total elimination or inhibition of undesired plant growth (overall toxic herbicides). The word "weeds" here also means undesired cultivated plants, e.g. those which have been previously planted or those which are planted in neighbouring areas. In addition, the compounds defined above also exert other inhibitory influences on the plant growth and may be used for example in particular for defoliation, e.g. of cotton plants, acceleration of ripeness by desiccation, e.g. of potato plants, blossom thinning, retardation of blossoming, or prolongation of the harvesting period and storing propensities. Also the use of herbicides can be of interest in the long run if the selectivity of the agent is insufficient, to exclude a reduction of the yield of the cultivated plants at the time of the application.

The following diamino - chloro - s - triazines can be used as active ingredients, some (A) are known, and others (B) are new:



A)	R ₁	R ₂	R ₃	R ₄
	CH ₃	H	H	CH ₃
	C ₂ H ₅	H	H	C ₂ H ₅
	CH ₂ =CH-CH ₂	H	H	CH ₂ =CH-CH ₂
	HO-CH ₂ -CH ₂	H	H	HO-CH ₂ -CH ₂
	C ₂ H ₅	C ₂ H ₅	C ₂ H ₅	C ₂ H ₅
	CH ₂ =CH-CH ₂	CH ₂ =CH-CH ₂	CH ₂ =CH-CH ₂	CH ₂ =CH-CH ₂
	HO-CH ₂ -CH ₂	HO-CH ₂ -CH ₂	HO-CH ₂ -CH ₂	HO-CH ₂ -CH ₂
	-CH ₂ CH ₂ CH ₂ CH ₂ CH ₂ -		-CH ₂ CH ₂ -CH ₂ -CH ₂ -CH ₂ -	
	-CH ₂ CH ₂ OCH ₂ CH ₂ -		-CH ₂ -CH ₂ -O-CH ₂ -CH ₂ -	
	H	H	H	CH ₃
	H	H	H	C ₂ H ₅
	H	H	H	C ₃ H ₇
	H	H	H	CH ₂ =CH-CH ₂
	H	H	H	C ₄ H ₉
	H	H	H	HO-CH ₂ CH ₂
	H	H	CH ₃	CH ₃
	H	H	C ₂ H ₅	C ₂ H ₅
	H	H	CH ₂ =CH-CH ₂ -	CH ₂ =CH-CH ₂ -
	CH ₃	H	H	C ₂ H ₅
	CH ₃	H	CH ₃	CH ₃
	C ₂ H ₅	H	C ₂ H ₅	C ₂ H ₅

B)	R ₁	R ₂	R ₃	R ₄	
	C ₃ H ₇	H	H	C ₃ H ₇	M.Pt. 210.5—212°
		H	H		M.Pt. 238—240°
	CH ₃	C ₄ H ₉	C ₄ H ₉	CH ₃	B.Pt. 0.004 111°
	C ₃ H ₇	C ₃ H ₇	C ₃ H ₇	C ₃ H ₇	B.Pt. 0.25 134—136°
	<i>i</i> -C ₃ H ₇	<i>i</i> -C ₃ H ₇	<i>i</i> -C ₃ H ₇	<i>i</i> -C ₃ H ₇	M.Pt. 111—112°
	CH ₃	HO-CH ₂ CH ₂	HO-CH ₂ CH ₂	CH ₃	M.Pt. 94.5—97°
	H	H	C ₃ H ₇	C ₃ H ₇	M.Pt. 144—146.5°
	CH ₃	H	C ₂ H ₅	C ₂ H ₅	M.Pt. 144—146.5°



B)	R ₁	R ₂	R ₃	R ₄	
	C ₃ H ₇	H	C ₂ H ₅	C ₂ H ₅	M.Pt. 112—114°
	CH ₃	CH ₃	C ₂ H ₅	C ₂ H ₅	B.Pt. 0-000 100°
	C ₂ H ₅	C ₂ H ₅	H	HO—CH ₂ CH ₂	M.Pt. 92—94°
	C ₂ H ₅	C ₂ H ₅	C ₃ H ₇	C ₃ H ₇	B.Pt. 0-003 112°
	n—C ₈ H ₁₇ —	H	H	n—C ₈ H ₁₇ —	M.Pt. 171.5—173°
	C ₆ H ₅ —CH ₂ —CH ₂ —	H	H	C ₆ H ₅ —CH ₂ —CH ₂ —	M.Pt. 243—244.5°
	C ₂ H ₅ —	H	CH ₃ —	CH ₃ —	M.Pt. 152—154.5°
	n—C ₄ H ₉ —	H	H	n—C ₄ H ₉ —	M.Pt. 207.5—209°
	n—C ₃ H ₇ —	H	CH ₃ —	CH ₃ —	M.Pt. 146.5—148.5°
	HO—CH ₂ —CH ₂ —	H	CH ₃ —	CH ₃ —	M.Pt. 143—144°
	CH ₃ —	H	H	n—C ₃ H ₇ —	M.Pt. 203.5—204.5°
	CH ₃ —	H	H	HO—CH ₂ —CH ₂ —	M.Pt. 180—181° (Decomp.)
	CH ₃ —	H	n—C ₃ H ₇ —	n—C ₃ H ₇ —	M.Pt. 134.5—136°
	C ₂ H ₅ —	H	H	n—C ₃ H ₇ —	M.Pt. 200—202°
	C ₂ H ₅ —	H	n—C ₃ H ₇ —	n—C ₃ H ₇ —	M.Pt. 103.5—105.5°
	C ₂ H ₅ —	H	H	HO—CH ₂ —CH ₂ —	M.Pt. 178—179° (Decomp.)
	H	H	CH ₃ —	cyclo C ₆ H ₁₁	M.Pt. 149—150°
	C ₂ H ₅ —	H	CH ₃ —	C ₆ H ₅ —CH ₂	M.Pt. 126—128°
	n—C ₄ H ₉ —	n—C ₄ H ₉ —	n—C ₄ H ₉ —	n—C ₄ H ₉ —	B.Pt. 0-002 124°
	n—C ₃ H ₇ —	n—C ₃ H ₇ —	CH ₃ —	CH ₃ —	B.Pt. 0-0015 98—101°

5 The plant growth influencing compositions according to the invention are either solutions, emulsions, suspensions or dusts. All application forms must contain the active substance in fine distribution. In particular, when total destruction of plant growth, premature desiccation or defoliation are desired, the effect can be increased by the use of carriers which are phytotoxic themselves such as, e.g., high boiling mineral oil fractions or chlorohydrocarbons. On the other hand, the selective inhibition of plant growth, e.g. selective weed killing in general may be better attained by the use of inert carriers.

15 Organic solvents boiling above 150° C. such as ketones, e.g. cyclohexanone, aliphatic hydrocarbons, e.g. kerosene, cyclic hydrocarbons e.g. tetrahydronaphthalene, alkylated naphthalenes and mineral and vegetable oils or mixtures of the above solvents are used for the production of solutions.

Aqueous application forms are made from emulsion and dispersion concentrates by adding water. The substances as such or dissolved in lower boiling solvents, such as alcohols, e.g. ethyl or isopropyl alcohol, ketones, e.g. acetone, or benzene, toluene, xylene or chlorinated hydrocarbons, e.g. tetrachlorethane or ethylene chloride, or in one of the above named solvents boiling above 150° C. are homogeneously incorporated into water, by means of wetting or dispersing agents. Examples of cation-active emulsifiers or dispersing agents are quaternary ammonium compounds; examples of anion-active emulsifying agents are soap, soft soap, aliphatic long chained sulphuric acid monoesters aliphatic aromatic sulphonic acids, long chained alkoxyacetic acids; examples of non-ionic emulsifiers are polyethylene glycol ethers of fatty alcohols and polyethylene oxide condensation products. Also, concentrates can be produced consisting of active substance, emul-

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sifier or dispersing agent and, if necessary, solvent. These latter are suitable for dilution with water.

Dusts can be produced by milling or blending active substance with a water - insoluble pulverulent carrier. Examples of such are: talcum, diatomaceous earth, kaolin, bentonite, calcium carbonate, tricalcium phosphate, sawdust, powdered cork, charcoal or other materials of vegetable origin. On the other hand, the carriers can be impregnated by means of a volatile solvent. Dusts and pastes can be suspended in water by the addition of wetting agents and protective colloids and so used as spraying agents.

As there exist both liquid and solid active compounds of almost the same herbicidal activity, both liquid concentrates for aqueous emulsions and wettable concentrates for aqueous suspensions with a high concentration of the active ingredient can easily be prepared. The various forms of application can be adapted to the intended use in the usual way by the addition of substances which improve the distribution, the adhesive properties, resistance to rain and, possibly the resorption. Such substances are: e.g. fatty acids, resins, wetting agents, glue, casein, or alginates. In the same way, the biological activity can be increased or amplified by the addition of substances which have a bactericidal or fungicidal action or of substances which also influence the growth of plants, as well as by combination with fertilisers.

The invention will be more clearly understood by reference to the following Examples in which Examples 1 to 4 illustrate suitable compositions and Examples 5 to 13 illustrate the range of application mentioned in the description being chosen examples of laboratory and field tests and the results obtained.

EXAMPLE 1.

20 Parts of 2 - chloro - 4:6 - bis - ethylamino - s - triazine and 80 parts of talcum are ground in a ball mill to the greatest degree of fineness. The mixture so obtained can be used as a dust.

EXAMPLE 2.

20 Parts of 2 - chloro - 4:6 - bis - diethylamino - s - triazine or 2 - chloro - 4 - ethylamino - 6 - diethylamino - s - triazine are dissolved in a mixture of 48 parts of diacetonalcohol, 16 parts of xylene and 16 parts of an anhydrous high molecular condensation product of ethylene oxide with high fatty acids. This concentrate can be diluted with water to give emulsions of any concentration desired.

EXAMPLE 3.

80 Parts of 2 - chloro - 4:6 - bis - ethylamino - s - triazine or 2 - chloro - 4 - ethylamino - 6 - diethylamino - s - triazine are mixed with 2-4 parts of a wetting agent, e.g. a sulphuric acid ester of an alkyl polyglycol ether, 1-3 parts of a

protective colloid, e.g. sulphite waste liquor, and 15 parts of an inert solid carrier such as, e.g. kaolin, bentonite, chalk or kieselguhr. The mixture is then ground very finely in a suitable mill. The wettable powder obtained can be added to water and gives very stable suspensions.

EXAMPLE 4.

10 Parts of 2 - chloro - 4:6 - bis - diethylamino - s - triazine are dissolved in 90 parts of a high boiling liquid such as, e.g. coal tar oil, Diesel oil or spindle oil.

EXAMPLE 5.

30 Grains of oats, 30 grains of mustard and 30 grains of cucumber were sown in flats which were filled 5cms. high with screened earth prepared in the following way. 100 mgs. of active substance, evenly distributed into 1 g. of talcum powder, are incorporated homogeneously into 1 litre of earth. Within 20 days, the seedlings of all three test plants were destroyed when the following substances were used as active ingredients:

2 - chloro - 4 - amino - 6 - ethylamino - s - triazine,

2 - chloro - 4 - amino - 6 - n - butylamino - s - triazine,

2 - chloro - 4 - amino - 6 - allylamino - s - triazine,

2 - chloro - 4 - amino - 6 - diethylamino - s - triazine,

2 - chloro - 4 - methylamino - 6 - ethylamino - s - triazine,

2 - chloro - 4 - methylamino - 6 - n - propylamino - s - triazine,

2 - chloro - 4:6 - bis - ethylamino - s - triazine,

2 - chloro - 4 - ethylamino - 6 - (β-hydroxyethylamino) - s - triazine,

2 - chloro - 4 - ethylamino - 6 - diethylamino - s - triazine.

EXAMPLE 6.

When tested exactly in the same way as described in Example 5, 2 - chloro - 4:6 - bis - (β - hydroxy - ethylamino) - s - triazine destroyed the seedlings of oats and mustard but did not have an influence on the cucumber seedlings.

2 - Chloro - 4 - ethylamino - 6 - dimethylamino - s - triazine only destroyed the seedlings of oats, whereas 2 - chloro - 4 - methylamino - 6 - (β - hydroxy - ethylamino) - s - triazine and 2 - chloro - 4 - methylamino - 6 - dimethylamino - s - triazine only destroyed the seedlings of mustard.

EXAMPLE 7.

For each compound to be tested and for control, a seed box was prepared as follows: in one half of the box 10 seeds of wheat, of mustard, of lucerne and of carrot were sown 3 cms. deep and in the other half 10 seeds of each of the above types of plants were sown 1 cm. deep. All the seed boxes were lightly watered. They were then sprayed with 0.1 litre per sq. m. of 2% emulsions or suspen-

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sions of the compounds to be tested (according to the state of aggregation), which corresponds to 2 g. of active ingredient per sq. m.

In the seed boxes treated with 2 - chloro-4-ethylamino - 6 - diethylamino - s - triazine, the mustard and lucerne had died whilst the wheat and carrots remained uninjured.

In the seed boxes treated with 2 - chloro-4:6 - bis - diethylamino - s - triazine, the mustard and lucerne died, the wheat was injured and the carrots grew normally.

EXAMPLE 8.

A dust produced from 10 parts of 2-chloro-4:6 - bis - diethylamino - s - triazine and 90 parts of talcum as carrier applied to 3—4 week old cotton plants caused severe leaf burn within 1—3 days after application. 2 - Chloro-4:6 - bis - diallylamino - s - triazine and 2-chloro - 4 - dimethylamino - 6 - diethylamino - s - triazine had similar effects.

EXAMPLE 9.

2 - Chloro - 4:6 - bis - diethylamino - s - triazine was applied at a rate of 1.8 g. per square metre as about 2% aqueous emulsion equivalent to 16 lbs. per acre in 100 gallons of water, to flats containing a loam high in organic matter and which had been seeded 24

hours previously with lima beans, cotton, rye grass (*Lolium perenne*), purslane (*Portulaca oleracea*) and crab grass (*Panicum sanguinale*). After 7 days, the germination of lima beans was 98.7% and the germination of cotton 92.9%, compared with the untreated flats. After 28 days, the cotton seedlings in treated flats had grown exactly as the controls and the lima bean plants in the treated flats were only very slightly inhibited. On the other hand, a 100% destruction of rye grass and purslane, and a 97.7% destruction of crab grass was observed in the treated flats.

EXAMPLE 10

Consecutive rows of wheat, oats, mustard, lucerne, radish, spinach and peas are planted in a field and immediately after the sowing the rows of seeds are divided into squares of an area of 6 sq. m. Each square is sprayed at a rate of 200 ccms. per sq. m. with a 0.5% emulsion or suspension of the compound to be tested, which corresponds to an application of 1 g. per sq. m. The growth was controlled weekly and was evaluated according to a scale wherein 10 corresponds to normal growth and 0 to complete destruction. After 4 weeks, the following results were obtained:

Substance used	wheat	oats	mustard	lucerne	radish	spinach	peas
I	0	0	0	0	0	0	10
II	1	1	2	0	0	0	10
III	1	0	9	0	0	0	10
IV	0	0	0	0	0	0	10
V	2	0	4	0	0	0	10
VI	2	0	6	0	0	0	10

I 2-chloro-4:6-bis-ethylamino-s-triazine;

II 2-chloro-4-methylamino-6-ethylamino-s-triazine;

III 2-chloro-4-methylamino-6-n-propylamino-s-triazine;

IV 2-chloro-4-ethylamino-6-diethylamino-s-triazine;

V 2-chloro-4-amino-6-ethylamino-s-triazine;

VI 2-chloro-4-ethylamino-6-n-propylamino-s-triazine.

EXAMPLE 11.

A pre-emergence field test on cotton consisted of applying 2 - chloro - 4:6 - bis - diethylamino - s - triazine to cotton at the time of planting at a rate of 2, 4, 6, 8, 10, 12, 18 and 24 lbs. per acre, emulsified in 80 gallons of water. Four replications were used for each

concentrations, each replication consisting of 2 rows being 20 ft. long. Stand counts were made 4 weeks after treatment and showed that the growth at all rates was normal and no injury of any kind was evident. Weed counts were made 4 and 8½ weeks after treatment and the results are given in the following Table:

treatment	4 weeks after treatment		8½ weeks after treatment	
	weeds per sq. ft.	% destruction	weeds per sq. ft.	% destruction
2 lbs.	10.2	57%	13.1	55%
4 lbs	7.2	69%	10.2	67%
6 lbs	2.9	87%	9.4	70%
8 lbs	2.6	89%	5.2	83%
10 lbs	2.2	90%	5.4	83%
12 lbs	2.0	91%	3.2	89%
18 lbs	0.8	96%	1.8	94%
24 lbs	0.9	96%	1.4	95%
untreated	23.8	—	31.8	—

The main weeds were panic grass (*Panicum spec.*) and chickweed (*Stellaria media*) but narrow leaf plantain (*Plantago lanceolata*) and wild carrot (*Daucus carota*) were also present.

EXAMPLE 12.

As a post emergence stem spray, 2 - chloro-4:6 - bis - diethylamino - s - triazine was applied to cotton (8—10" tall), corn (12—14" tall) and beans (10—12" tall) at a rate of 16 lbs. per acre emulsified in 40 gallons of water. Three replications were used for each plant and each replication was one row being 20 ft. long. A four inch band on each side of the row was sprayed with the nozzles overlapping approximately 1½" up the plant stem. Weeds present were panic grass, rag weed (*Ambrosia elatior*), chickweed, narrow leaf plantain, nut grass (*Cyperus rotundus*) and purslane and all were well established as no cultivation had taken place from the time of planting 4 weeks earlier.

Growth ratings and observations showed that the growth of cotton and corn was normal and that the growth of beans was reduced slightly, with no injury of any kind to any of the crops.

Weed counts 3 and 5 weeks after treatment

showed that control ranged from 87—97%.

EXAMPLE 13.

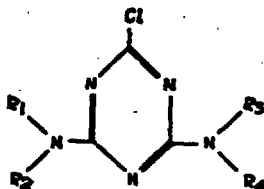
The herbicidal action was tested on a garden path well established with weeds which path had not been weeded mechanically for one year. Two active ingredients, 2 - chloro-4 - ethylamino - 6 - diethylamino - s - triazine (I) and 2 - chloro - 4:6 - bis - ethylamino - s - triazine (II) according to the present invention were used in amounts of 1, 0.5 and 0.2 g. per square metre. The path was divided into areas of 7.5 square metres for the respective concentrations and compounds. Application was made in the middle of August by spraying of suspensions of corresponding concentrations in 1 litre of water per square metre. The types of weeds were, in particular rye grass (*Lolium species*) as well as some further undetermined grasses, dandelions (*Taraxacum officinalis*) and plantain (*Plantago media*). Numerous young plants of the two latter were already in development and germination took place continuously. On controlling the weeds 25 days after application, the following effect on the weeds was found:

TABLE

Product	Concentration g/sq. m.	Lolium	Other grasses	Plantago	Taraxacum
I	1	strongly damaged, only single green leaves left	dead	dead	old plants only slightly affected. No young plants present.
	0.5	some slightly, some seriously damaged, a few plants dead	dead	some seriously damaged, some dead	old plants only slightly affected. Some young plants present.
	0.2	practically normal; some slightly damaged	dead	considerably damaged	old plants normal, many young plants present.
II	1	dead	dead	dead	not present.
	0.5	some dead, some with green leaves	dead	dead	not present.
	0.2	plants seriously damaged but not dead	dead	some dead, some seriously damaged	old plants normal, but no young plants present

WHAT WE CLAIM IS:—

1. Composition for influencing the growth of plants, especially for killing weeds, comprising an s - triazine derivative of the general formula:



- wherein R_1 , R_2 , R_3 represent hydrogen, alkyl, alkenyl, hydroxyalkyl, aralkyl or cycloalkyl radicals, and

- R_4 represents alkyl, alkenyl, hydroxyalkyl, aralkyl, or cycloalkyl radicals, whilst R_1 can be bound to R_2 or R_3 to R_4 either direct or by way of an oxygen atom and as a carrier.

- a) a water-insoluble pulverulent solid, or
b) an organic solvent boiling above 150°C. , or
c) an emulsifying agent together with a water-insoluble pulverulent solid or an organic solvent.

2. Composition as claimed in claim 1 in which R_1 , R_2 and R_3 represent hydrogen, alkyl radicals having at most 3 carbon atoms or

alkenyl radicals having at most 3 carbon atoms, and R_4 represents an alkyl radical having at most 3 carbon atoms or an alkenyl radical having at most 3 carbon atoms.

3. Composition as claimed in claim 1 or 2 in which the s - triazine derivative is 2 - chloro-4:6 - bis - ethylamino - s - triazine.

4. Composition as claimed in claim 1 or 2 in which the s-triazine derivative is 2 - chloro-4 - methyl - amino - 6 - diethylamine - s - triazine.

5. Composition as claimed in claim 1 or 2 in which the s-triazine is 2-chloro-4-ethyl-amino - 6 - n - propyl - amino - s - triazine.

6. Composition as claimed in claim 1 or 2 in which the s-triazine is 2 - chloro-4-methyl-amino - 6 - ethylamino - s - triazine.

7. Composition as claimed in any of the preceding claims in which the carrier is phytotoxic.

8. Composition as claimed in any of claims 1 to 6 in which the carrier is inert.

9. Composition for influencing the growth of plants substantially as herein described with reference to and as illustrated in any of the foregoing Examples.

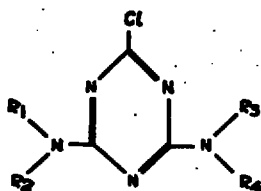
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TABLE

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	0.2	practically normal, some slightly damaged	dead	considerably damaged	old plants normal, many young plants present.
II	1	dead	dead	dead	not present.
	0.5	some dead, some with green leaves	dead	dead	not present.
	0.2	plants seriously damaged but not dead	dead	some dead, some seriously damaged	old plants normal, but no young plants present

WHAT WE CLAIM IS:—

1. Composition for influencing the growth of plants, especially for killing weeds, comprising an s - triazine derivative of the general formula:



- wherein R_1 , R_2 , R_3 represent hydrogen, alkyl, alkenyl, hydroxyalkyl, aralkyl or cycloalkyl radicals, and R_4 represents alkyl, alkenyl, hydroxyalkyl, aralkyl, or cycloalkyl radicals, whilst R_1 can be bound to R_2 or R_3 to R_4 either direct or by way of an oxygen atom and as a carrier.
- a) a water-insoluble pulverulent solid, or
b) an organic solvent boiling above 150°C. , or
c) an emulsifying agent together with a water-insoluble pulverulent solid or an organic solvent.
2. Composition as claimed in claim 1 in which R_1 , R_2 and R_3 represent hydrogen, alkyl radicals having at most 3 carbon atoms or

alkenyl radicals having at most 3 carbon atoms, and R_4 represents an alkyl radical having at most 3 carbon atoms or an alkenyl radical having at most 3 carbon atoms.

3. Composition as claimed in claim 1 or 2 in which the s-triazine derivative is 2-chloro-4:6-bis-ethylamino-s-triazine.

4. Composition as claimed in claim 1 or 2 in which the s-triazine derivative is 2-chloro-4-methyl-amino-6-diethylamine-s-triazine.

5. Composition as claimed in claim 1 or 2 in which the s-triazine is 2-chloro-4-ethylamino-6-n-propyl-amino-s-triazine.

6. Composition as claimed in claim 1 or 2 in which the s-triazine is 2-chloro-4-methylamino-6-ethylamino-s-triazine.

7. Composition as claimed in any of the preceding claims in which the carrier is phytotoxic.

8. Composition as claimed in any of claims 1 to 6 in which the carrier is inert.

9. Composition for influencing the growth of plants substantially as herein described with reference to and as illustrated in any of the foregoing Examples.

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