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<u>A Struggle With Titans</u> pages;

128dying birch and chestnut trees282litigation after damage in Northern Switzerland283data from Holland on tulips and gladioli,
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Fluorine in Stomatology and Hygiene pages:

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Fluoridation and Truth Decay pages;

6	fluoride damage comprised a "substantial part" of air pollution damage in 1967 to agricultural production in the US, estimated at \$500,000,000
26	visible damage in some plants, not others
27	54 ppm in Santa Clara Valley, California, raspberry crop — air pollution, pesticides suspected
27	7 ppm FDA standard set after growers found they could not meet standards below this level
27	2 ppm standard for fluoride in food in Canada
27	24.6 ppm on spinach crops near fluoride-emitting plant at Troutdale, Oregon
61-2	Dr Waldbott studies effects of fluoride air pollution on vineyards and their owners in Italy
125	Electric Reduction Company of Canada fertilizer plant at Port Maitland, Ontario, fluoride pollution and destruction of animals/plants, poisoning of residents

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125 fertilizer production halted during growing season at ERCO Port Maitland plant 128 over 1000 ppm in vegetation after Donora disaster damage to citrus groves by 17 Polk 129 County, Florida, phosphate plants 129-130 Senators turn deaf ear to fluoride pollution Barci v Intalco lawsuit over fluoride damage to 130-2 crops, livestock and human health from aluminium plant out-of-court payoffs and settlements to farmers 136 142 symptoms of fluoride damage to trees and gladiolus 143 80 ppm in gladiolus indicates 3 ppb in Los Angeles air a different answer about fluoride air pollution in 143-4 San Bernadino and growth of pine trees at Arrowhead several decades spent on research into citrus crops 147-8 calcium sprays ineffective in protecting citrus trees 148 148-9 Kaiser Steel and pollution of California citrus groves 149 split suture in peaches near aluminium mill 149-152 fluoride air pollution damage in California and damage to pine trees 153-4 experts claim pine damage caused by ozone 154-5 \$10m investigation of pine tree deaths report on fluoride pollution from 155-8 Anaconda Aluminium Company in Glacier National Park, Montana special chemicals required to 158 remove fluoride from polluted fruits 158-9 from 3 ppm up to 140 ppm in crops in first 73 days of operation of Harvey Aluminium Company, The Dalles, Oregon 161-2 US Dept of Agriculture Handbook No 380 164 damage to Dutch tulips 164 reduced yield and poisoning of citrus, crops, forestland

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	Rocky	Mountain	Phose	shate	Com	pany	in Ga	arrison,	Mor	ntana

Environmental Fluoride 1977 pages;

22	factors influencing fluoride content of vegetation
23	fluoride levels and damage; Scottish aluminium smelter
	fluoride levels and damage; Canadian aluminium smelter
	extensive injury to vegetation; Montana smelter
	fluoride levels and damage; Canadian phosphate plant
23-24	"twenty-plus square mile 'death band' of dead timber trees around Kitimat, BC smelter
24	fluoride in beech leaves in urban and non-urban Austria
29	reduced photosynthesis and stimulated dark respiration in pines and hardwoods
29	doubtful that stimulation of plant growth by fluoride "is of any evolutionary, ecological or economic advantage"

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Environmental Fluoride 1977 continued;

30	growth of airborne fluoride damage, reported since 1880s
	reviews of biochemical and morphological changes
f	oliar damage, reduced growth and accumulation of fluoride
31	effects on conifers, and species dominance
	epiphytes and bryophytes
31	effect on pollinating insects
32	linear correlation between HF concentration and inhibition of apparent photosynthesis in barley and alfalfa, absence of no-effect threshold
	stomatal closure, reduced transpiration and increased leaf temperature in soybeans fumigated at low HF concentration
32	reduced photosynthesis rate and increased dark respiration rate in fluoride-sprayed trees
32	NaF and HF induced chromosomal aberrations in barley roots
	reduced vigour in second generation bean seedlings
32	30-70% diameter reduction in pine trees with no other visible injury
	linear decrease in pollen tube length in cherry blossoms in relation to product of exposure-time and level
33	decrease in pollen tube length in apricot
	decrease in pollen germination and tube length in tomato and cucumber plants
	inhibition of seed production or fruiting with soybean, bell-pepper, sweet corn and cucumber more susceptible than pea, grain sorghum or wheat
33	50% leaf necrosis in Cordyline terminalis in water with 0.5 ppm
33	"soft-suture" of peaches
	calcium and magnesium deficiency increases phytotoxicity
	reduction in oxygen absorption
	multi-stress effects

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33 depletion of magnesium/manganese in situ in pine needles 33-34 effect on insect balance air pollution favours insect attack 34 misinterpretation of insect role in Kitimat "death band area" synergistic effect of fluoride in sulphur dioxide in some species fluoride damage to apricot orchards greater when trees were stressed by competition from weeds 34 effect on epicuticular waxes in pine needles, increasing water loss and susceptibility to parasites 34 perioxidase increased phenolic content in Norway spruce 34-35 equations to find airborne fluoride from lime paper measurements 35-38 criteria for crop injury 35 correlation between harmful effects and exposure table 9; regression equations for 36 fluoride-plant response fig 2: influence of airborne fluoride on yield of 37 beans, strawberries and oranges influence of airborne fluoride on yield of 38 beans, strawberries and oranges highly significant multiple regression between fluoride content of forage and of air+soil safe air level for forest species 38 between 0,17 and 0,23 microgram/m³ recommendations of NAS report 110-111 on research for the future: on biochemistry of plant and animal damage by fluoride on uptake of fluoride from air by plants on fluoride bonding and solubility in plant tissue on the relationship between the fluoride contents of groundwaters and the mineralogical/chemical composition of the source rocks

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