

광주환경운동연합 도시농업교육 2012 나는 텃밭달인

옥상과 베란다로부터 만들어가는 녹색도시

urban agriculture & city farm as alternative strategies for ecological urbanism

趙東範

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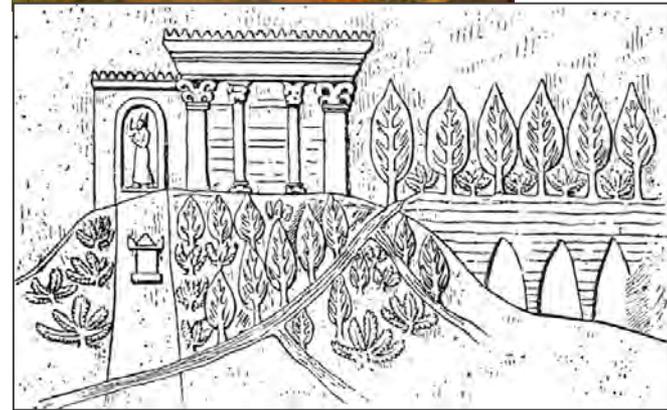
Le laboratoire





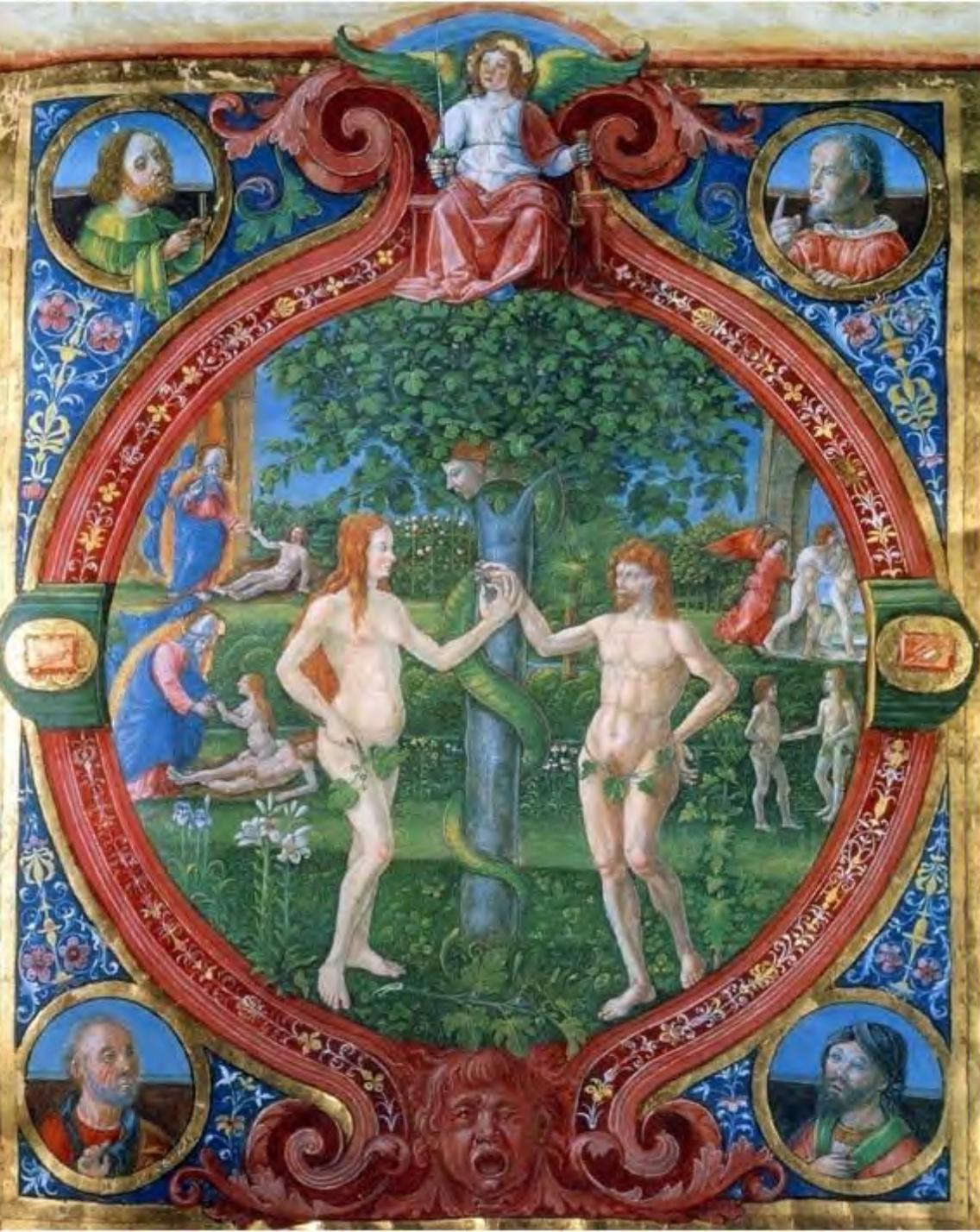






고대 바빌론의 공중정원

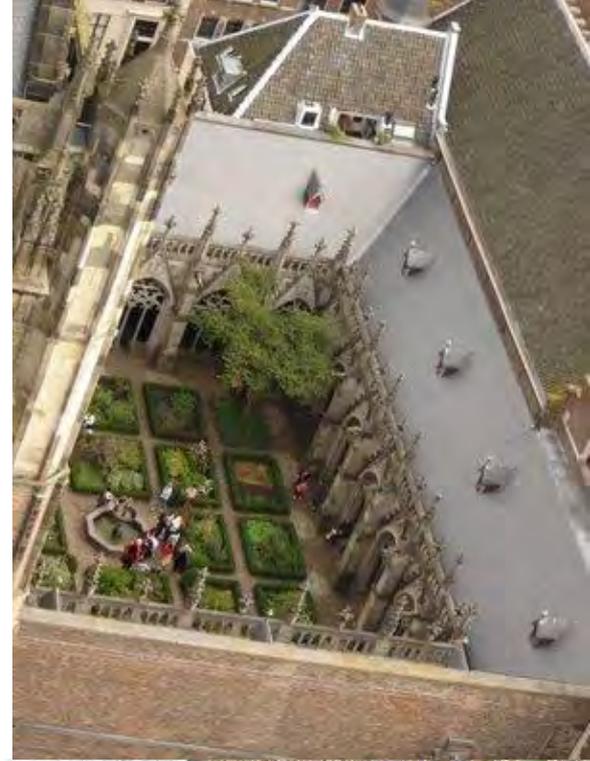




창세기의 에덴 동산

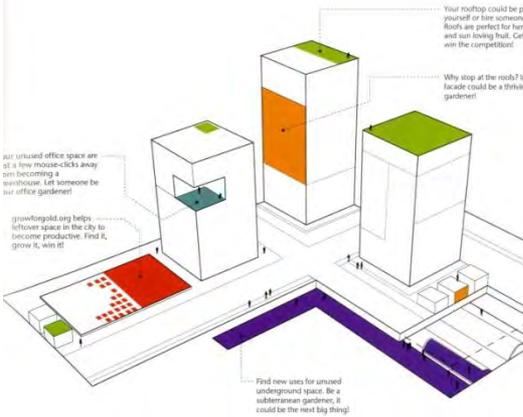
When the Lord God made earth and heaven, there was neither shrub nor plant growing wild upon the earth, because the Lord God had sent no rain....; nor was there any man till the ground...

Then the Lord God planted a garden in Eden away to the east, and there he put the man whom he had formed. The Lord God made trees spring from the ground, all trees pleasant to look at and good for food; and in the middle of the garden he set the tree of life and the tree of knowledge of good and evil... The Lord God took the man and put him in garden of Eden to till it and care for it.

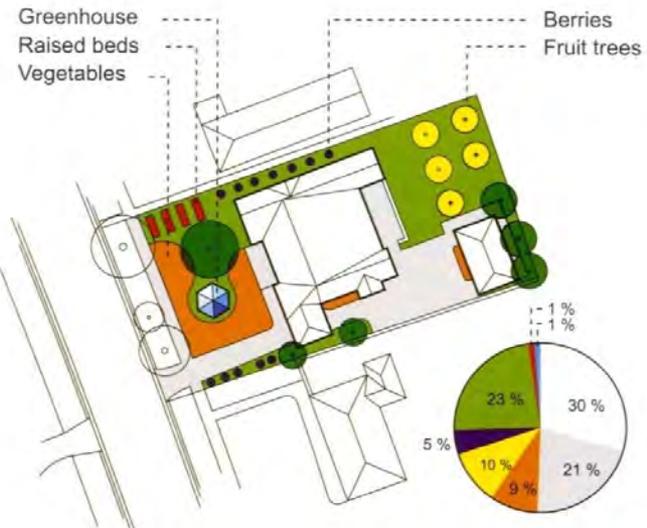
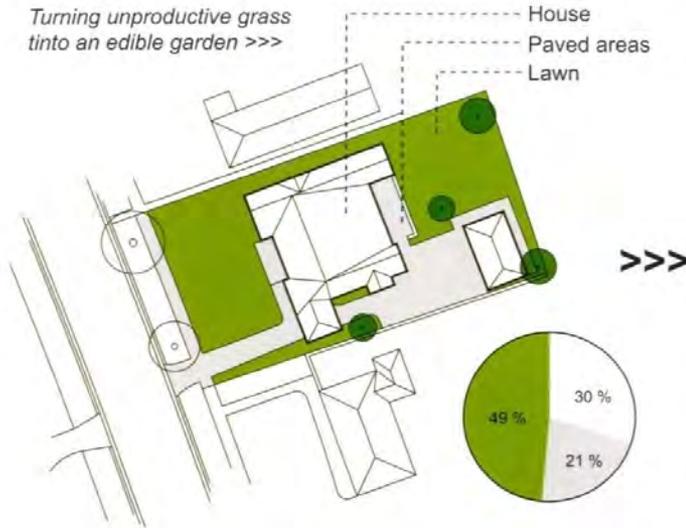




growforgold.org In Your Yard



Turning unproductive grass into an edible garden >>>



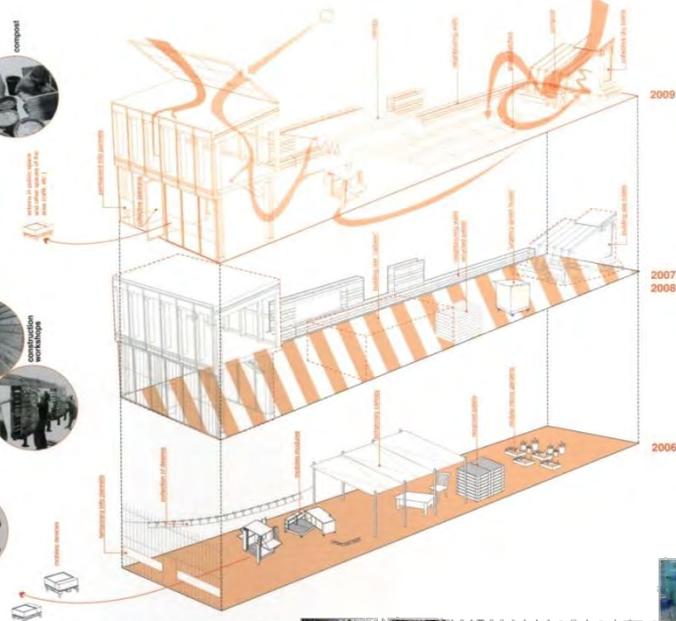
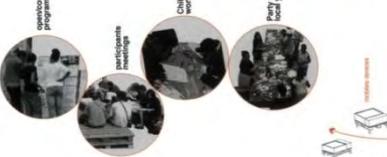
CURRENT USES



'OPEN BUILDING SITE'



INITIAL USES



Axonometric projection of the project

ECOBOX를 매개로 한 문화생태 경관
 Passage 56 / espace culturel écologique @ Paris
 AAA







극락초등학교 생명텃밭.광주전남귀농학교



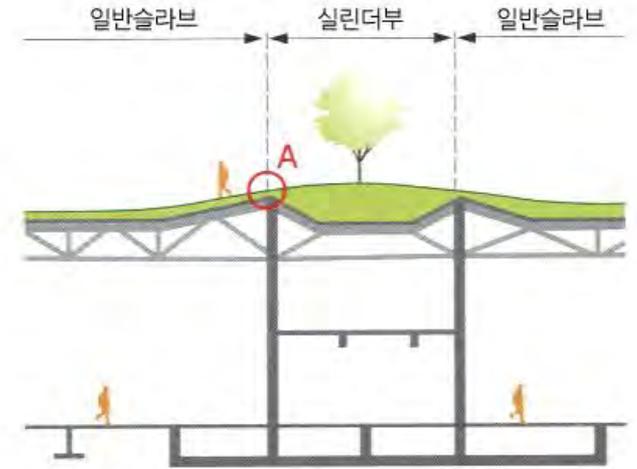




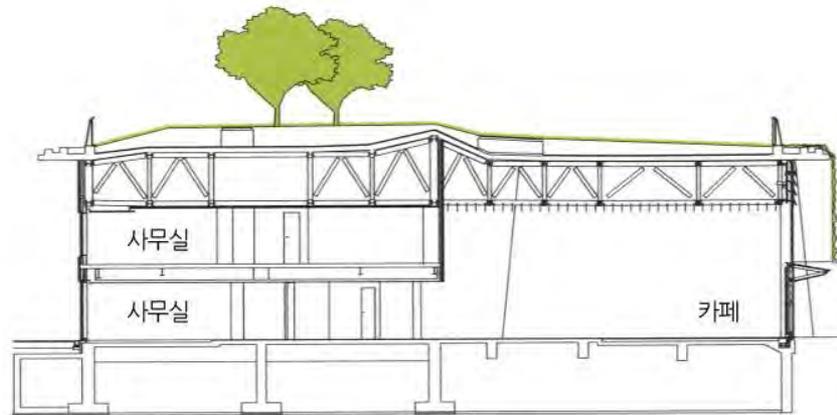
국영 쇼와기념공원 하나미도리문화센터

도쿄도 다치가와시, 2005

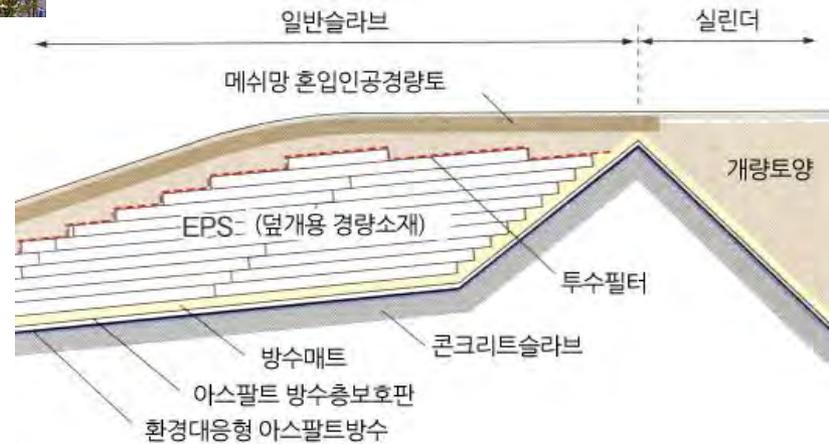




단면개념도



단면도



A 부분 단면개요도



경기문화재단



삼흥컬렉션빌딩





성미산학교_서울시 마포구 성산동_274m²

꽃잎세상 : 습지와 초지비오톱

세덤식물원 : 저관리 경량형 세덤 식재

마고지나 : 수생식물을 중심으로 하는 수생식물원



송죽동 녹색마을_경기도 수원시 장안구

2007년 국토해양부 살고싶은 도시만들기사업
저토심 경량형 녹화_세덤류, 섬기린초



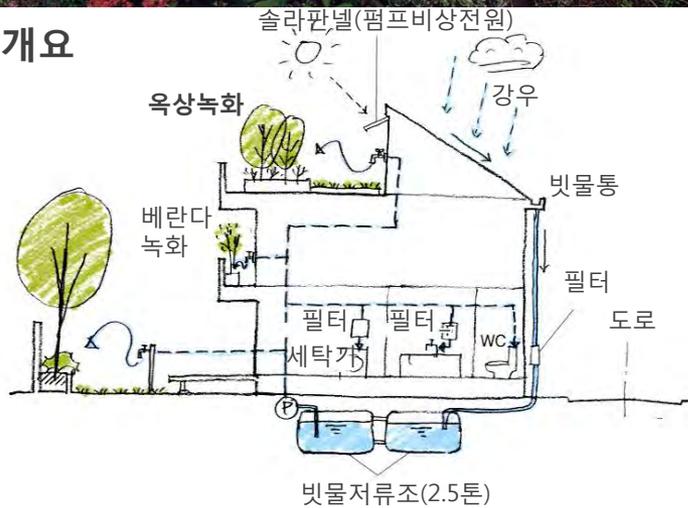
진다이(深大寺) 공동주택 주차장 옥상정원 _ 東京都 調布市

1,350m²

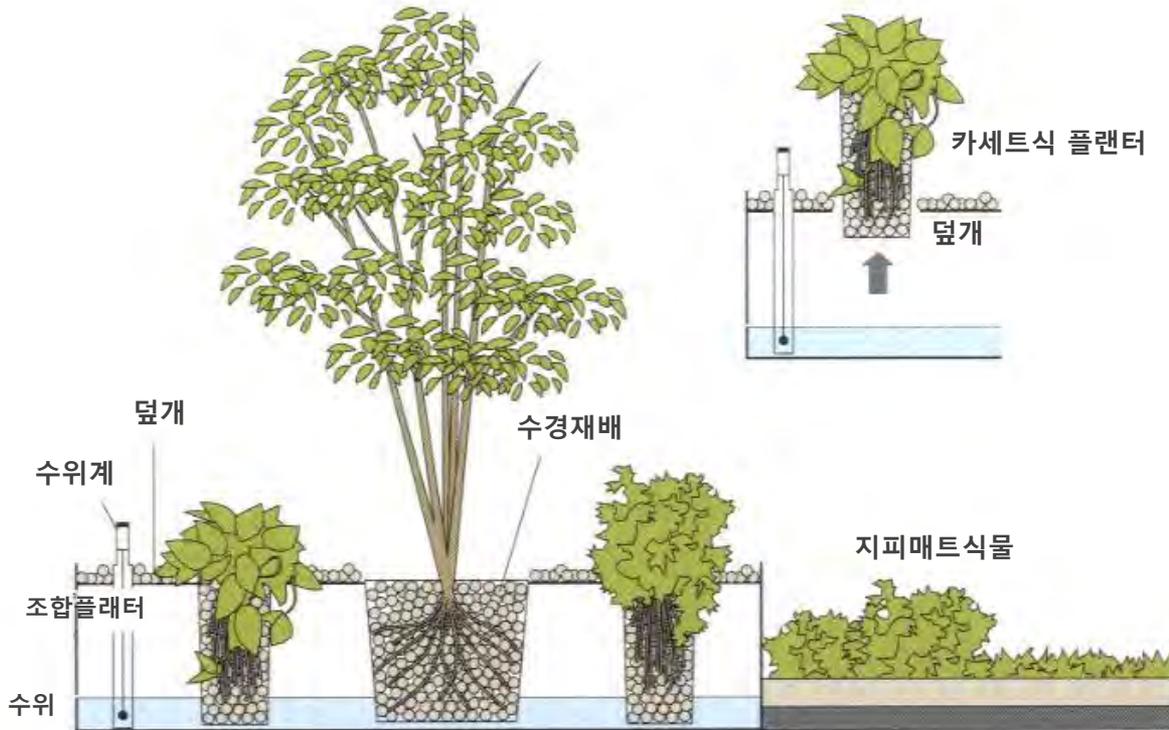




빗물활용시스템 개요



같이 끼울 수 있는 플랜터 방식의 옥상녹화



1. 시공전. 방수는 FRP 방수
2. 주위에 식재틀을 설치하고 방근쉬트를 깔고 그 위에 보수용 우레탄매트 깔기
3. 컨테이너 설치. 상부에는 플랜터를 끼울 수 있는 구멍이 있으며 컨테이너 주변에는 벌집모양 플랜터 설치
4. 컨테이너에 플랜터를 끼우고 주변은 잔디 식재



AGRIS SEIJO _ 아그리스成城, _ 東京都世田谷区成城5-1-1

오다큐선 복선화로 발생한 노선 인공지반(5,103m²)을 활용하여 회원제 임대형 텃밭으로 정비
도구와 비료가 완비되어 있으며 직원상주
2008년 9월 현재 회원 318명 등록(1구획 6m² 116구획 임대)
임대료 136,500엔/1년 (종자대는 실비별도)

토양 : 경량의 전용토양과 옥상녹화용 저류 배수매트 설치
옥상면에는 암거관과 종단구를 설치하여 인공지반 배수기능 확보

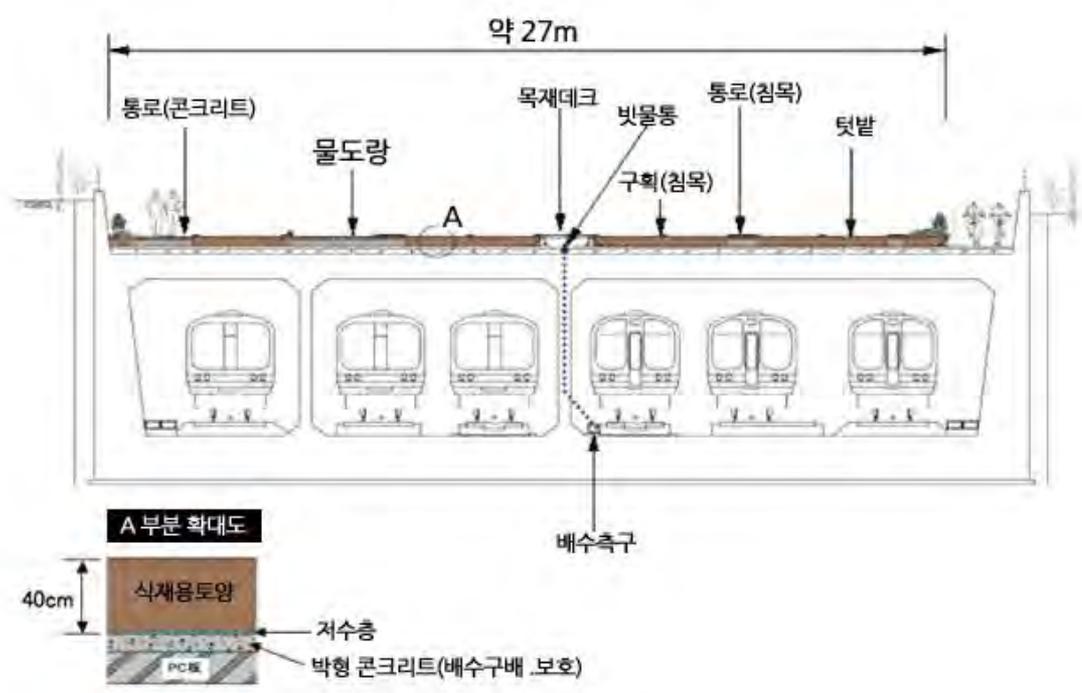
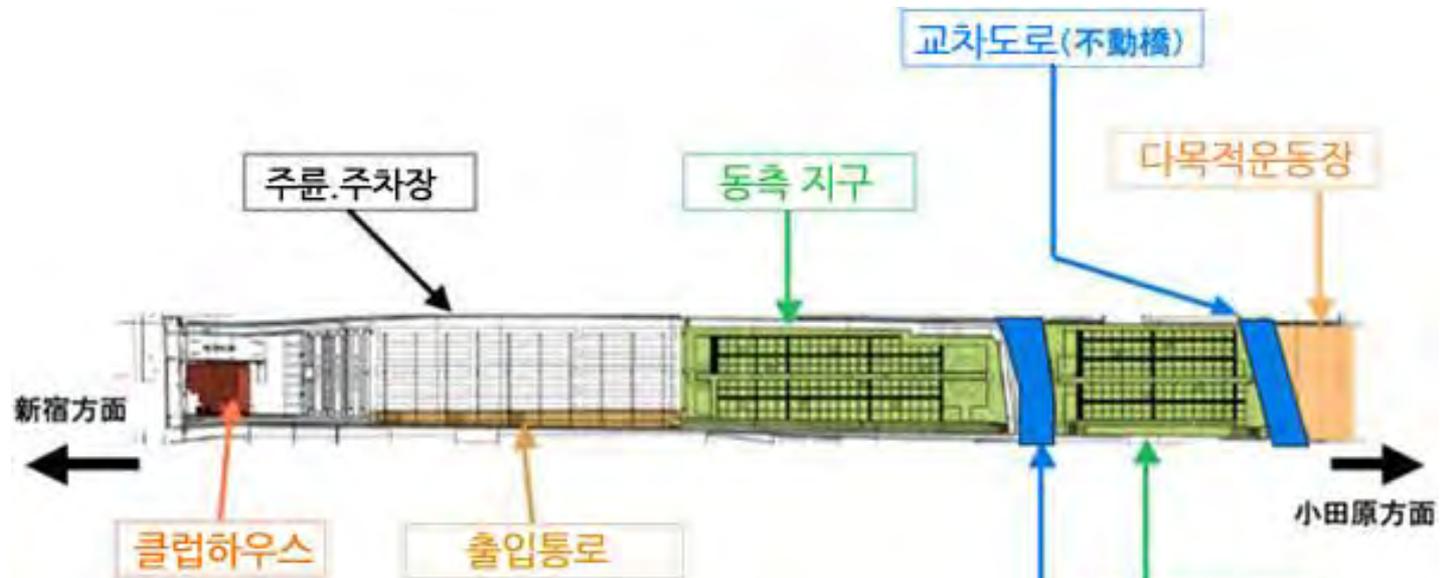


アグリス成城 「AGRIS SEIJO」 プロジェクト









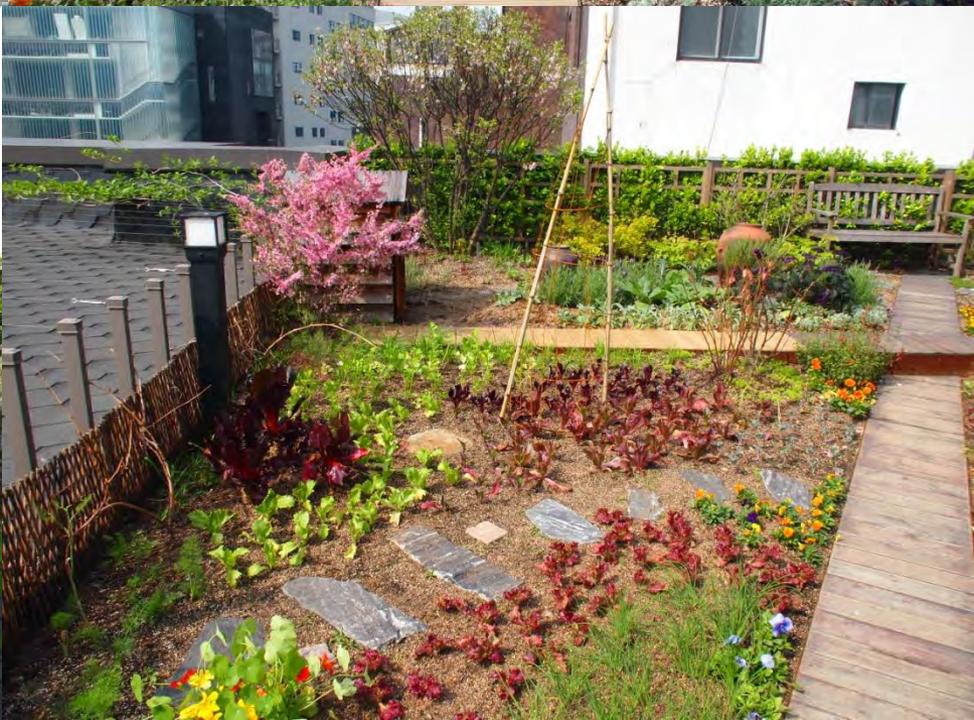
도시농부의 작업실

2012. 4. 5 - 2012. 5. 20

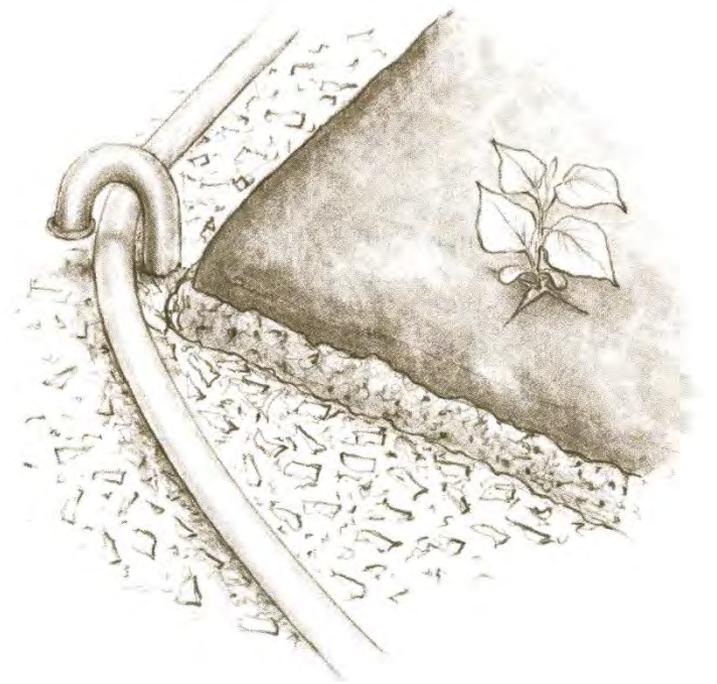
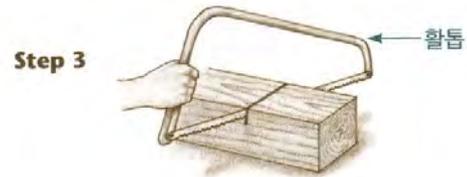
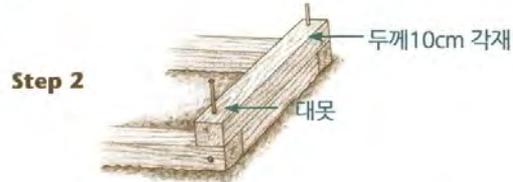


한국공예.디자인문화진흥원





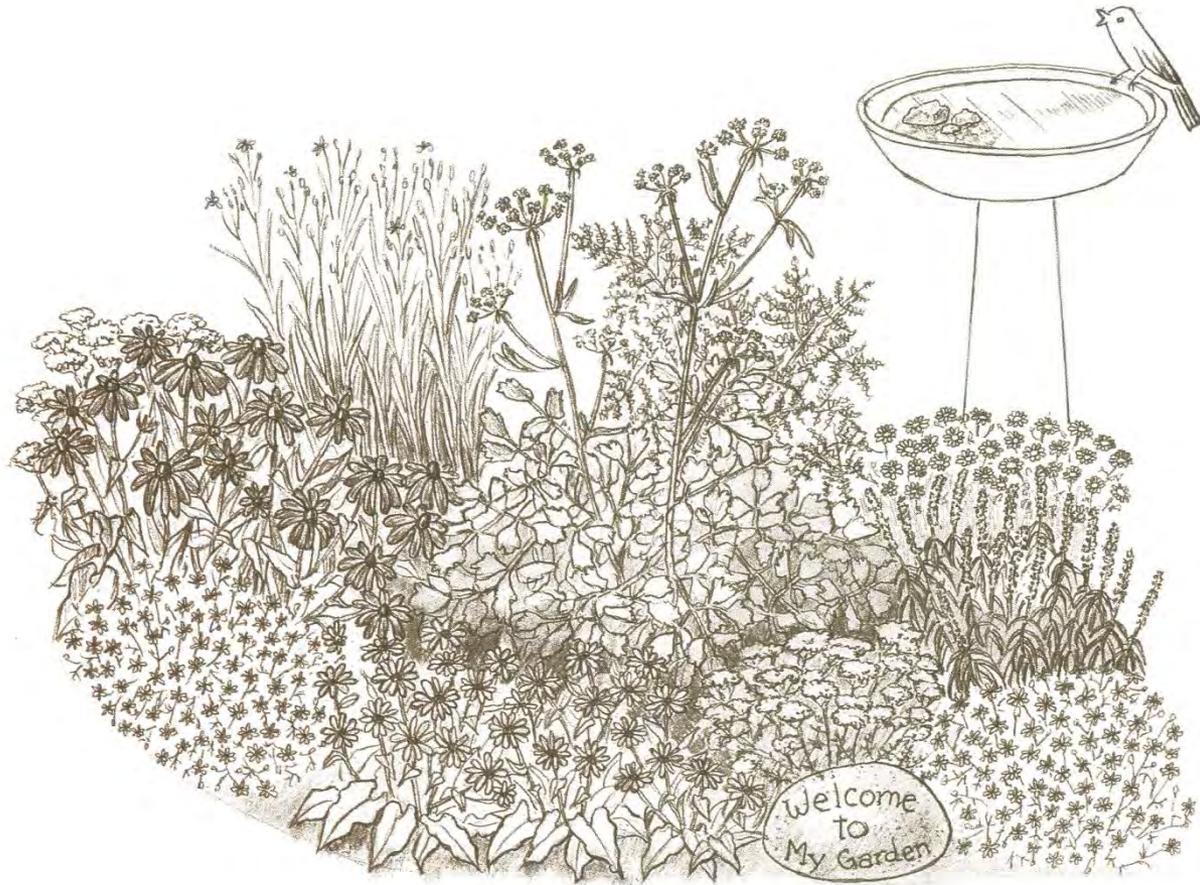
간단한 텃밭만들기



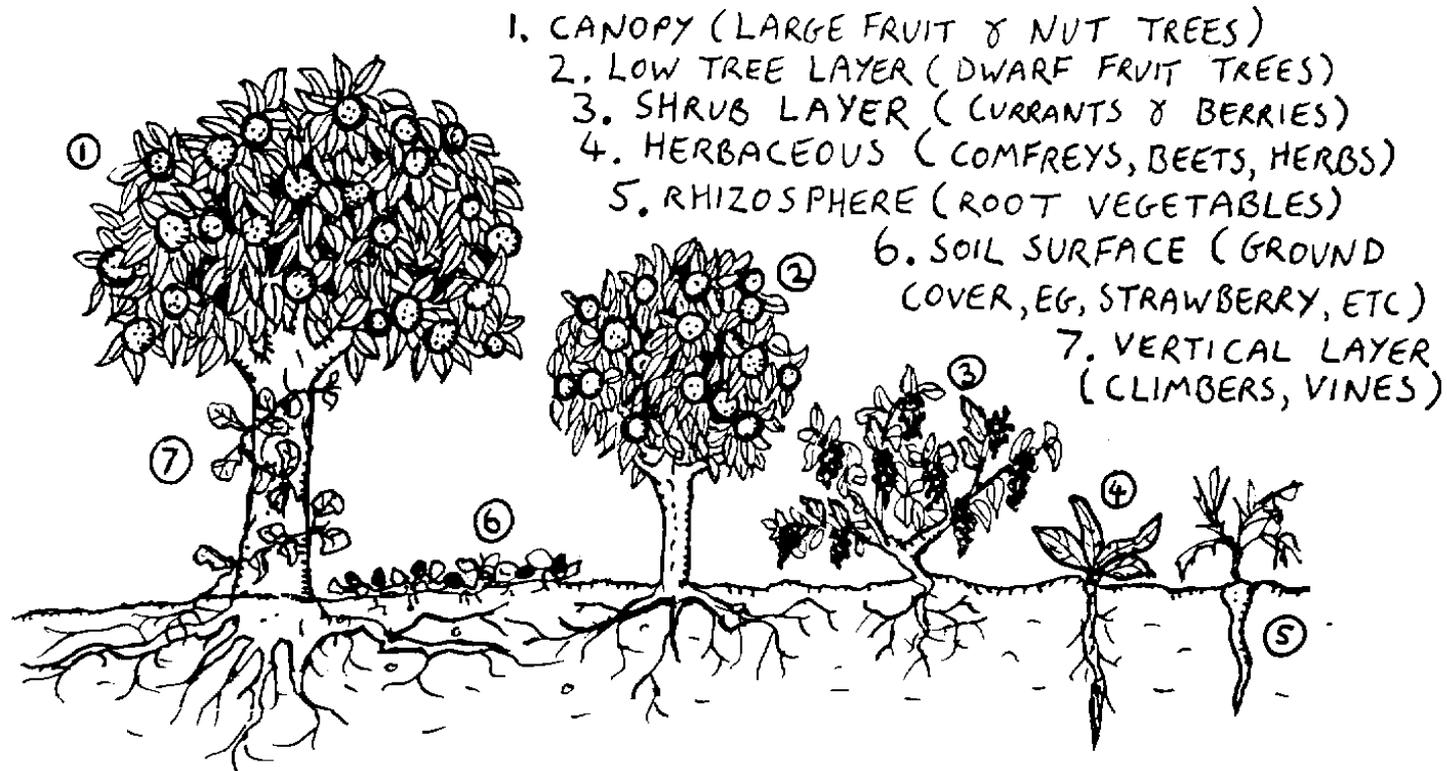




텃밭정원에의 초대 welcome garden 도 만들어 보자



정원에서든 숲을 만들어보자



THE FOREST GARDEN: A SEVEN LEVEL BENEFICIAL GUILD



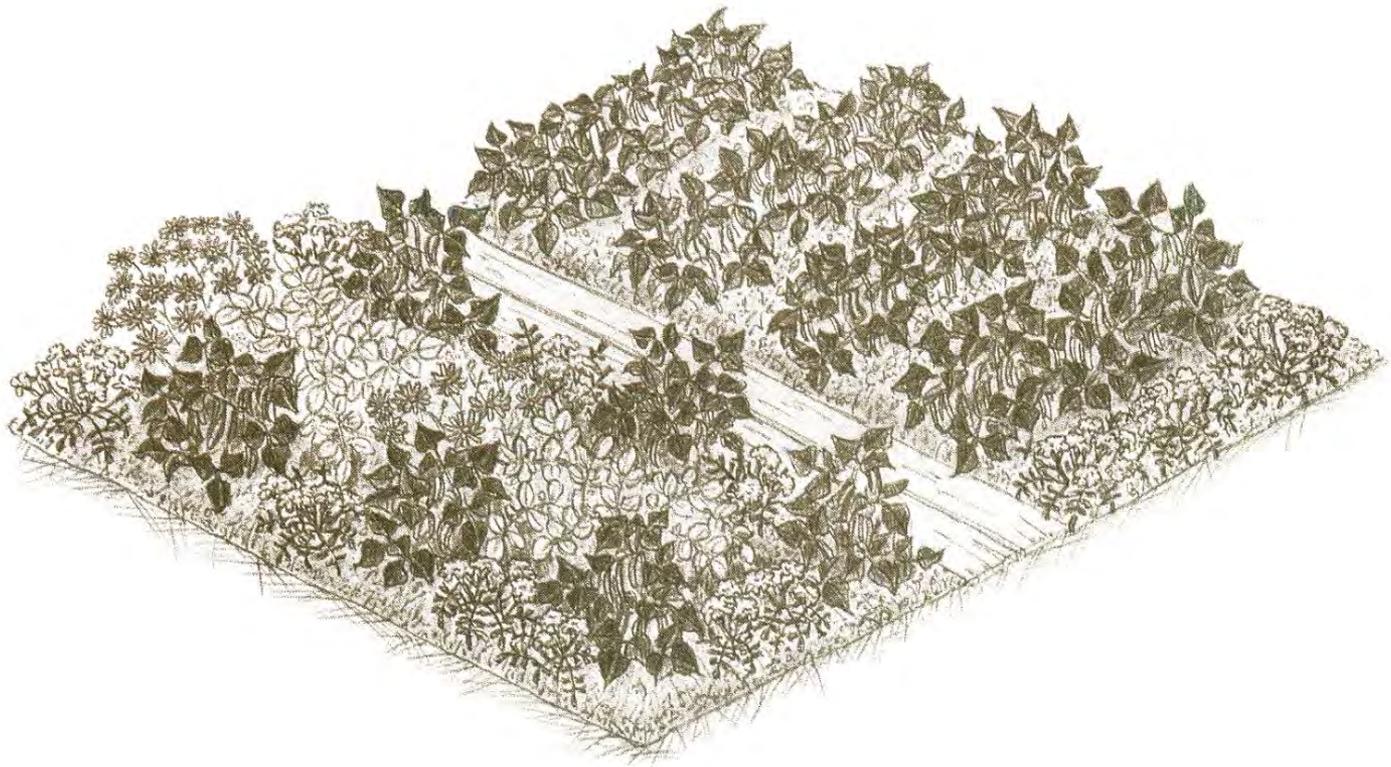
美しいだけじゃつまらない、おいしく暮らそう

小さなチョウやハチを呼ぶシソの花もかわいいものです。チリメンシソやアオシソはひなたでも日陰でも丈夫に育ちますから、ガーデニング素材として利用すれば一石二鳥。こぼれタネも鳥たちの貴重なエサとして役立ちます。コリウスもよいけどシソもなかなかです。



당근은 토마토를 사랑해...!?





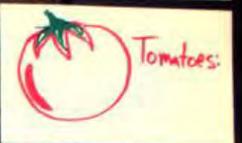
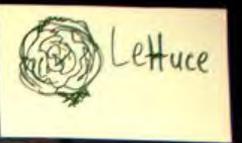
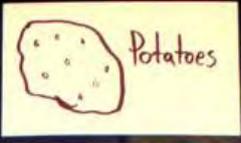


Love: Peas, Lettuce,
Chives, onions, Leeks
radishes, tomatoes

HATE: Dill

Love: Carrots, asparagus,
Celery, onions, garlic
parsley, chives

HATE: Potatoes, cabbage, Corn



A BASIC GUIDE TO

COMPANION PLANTING



Companion planting is a technique used by gardeners to grow different plants together to benefit them. It can help to repel pests, attract beneficial insects, and improve soil health. Companion plants can also help to improve the flavor and yield of the main crop.

There are many different types of companion plants, and they can be used in a variety of ways. Some are used to repel pests, while others are used to attract beneficial insects. Some are used to improve soil health, while others are used to improve the flavor and yield of the main crop.

Companion planting can be a very effective way to improve your garden. It can help to reduce the need for pesticides and fertilizers, and it can help to create a more balanced and healthy ecosystem. Companion planting can also be a fun and creative way to design your garden.

Illustration of a garden path leading through a field of plants.

Plant	Repels	Attracts	Improves Soil	Improves Flavor	Improves Yield
Asparagus	Asparagus Beetle				
Beans	Bean Beetles, Flea Beetles	Beneficial Insects			
Broccoli	Broccoli Worms, Flea Beetles				
Carrots	Carrot Root Flies, Flea Beetles				
Cauliflower	Cauliflower Moths, Flea Beetles				
Corn	Corn Earworms, Flea Beetles				
Cucumbers	Cucumber Beetles, Flea Beetles				
Eggplant	Eggplant Moths, Flea Beetles				
Kale	Kale Worms, Flea Beetles				
Lettuce	Lettuce Beetles, Flea Beetles				
Onions	Onion Flies, Flea Beetles				
Potatoes	Potato Beetles, Flea Beetles				
Spinach	Spinach Leafminers, Flea Beetles				
Tomatoes	Tomato Worms, Flea Beetles				
Zucchini	Zucchini Moths, Flea Beetles				

- Insect Beneficials**
- ANTS - Flea Beetles, Flea Beetles
 - APHIDS - Flea Beetles, Flea Beetles
 - CABBAGE ROOT FLIES - Flea Beetles, Flea Beetles
 - CATERPILLARS - Flea Beetles, Flea Beetles
 - FLIES - Flea Beetles, Flea Beetles
 - FLIES - Flea Beetles, Flea Beetles
 - FRUIT FLIES - Flea Beetles, Flea Beetles
 - FUNGUS - Flea Beetles, Flea Beetles
 - WEEVIL - Flea Beetles, Flea Beetles
 - WORMS - Flea Beetles, Flea Beetles
 - MOSQUITOES - Flea Beetles, Flea Beetles
 - NEMATODES - Flea Beetles, Flea Beetles
 - RED SPIDER - Flea Beetles, Flea Beetles
 - SLUGS - Flea Beetles, Flea Beetles
 - SHELLS - Flea Beetles, Flea Beetles
 - THrips - Flea Beetles, Flea Beetles
 - TOMATO WORM - Flea Beetles, Flea Beetles
 - WEEVILS - Flea Beetles, Flea Beetles
 - WHITE FLY - Flea Beetles, Flea Beetles

Centrale
 National Association of Sustainable
 Agriculture
 200 New York Avenue, N.W., Room 4000
 Washington, D.C. 20004
 202-546-4600
 202-546-4601
 202-546-4602
 202-546-4603
 202-546-4604
 202-546-4605
 202-546-4606
 202-546-4607
 202-546-4608
 202-546-4609
 202-546-4610

For Further Reading
 Companion Planting and How to Use It -
 Henry Mitchell
 Companion Planting -
 Charles A. Davis
 Companion Planting in Australia -
 Brenda Little



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Companion Planting with Vegetables

	Bush	Pole		Cab				Cuc	Egg-									Straw		
	Beans	Beans	Beets	bage	Carrots	Celery	Corn	umber:	plant	Lettuce	Melon	Onion	Pea	Pepper	Radish	Spinaci	Squash	berry	Tomato	Special
Basil														X					X	
Bush beans			X	X	X	X	X	X	X	X		N	X		X			X		A, B
Pole Beans			N		X		X	X	X	X		N	X		X					A, B
Beets	X			X								X								
Cabbage family	X		X			X						X						N	X	C
Carrots	X	X								X		X	X		X				X	D
Celery	X			X								X				X			X	
Corn	X	X						X			X		X				X		N	
Cucumbers	X	X					X			X		X	X		X					E
Eggplant	X	X														X				
Lettuce	X	X			X			X				X			X				X	
Marigold	X	X		X			X											X	X	
Melon							X								X					
Nasturtium				X				X			X				X		X		X	
Onion	N	N	X	X	X	X		X		X			N	X			X	X	X	A
Parsley																			X	
Peas	X	X			X		X	X				N			X					Turnips
Pepper												X								
Raddish	X	X			X			X		X	X		X				X			F
Sage			X	X	X			N												
Spinach						X			X									X		G
Squash							X					X			X					
Strawberry	X			N						X		X				X				
Tomato				X	X	X	N					X								H

N means the plants cannot tolerate each other; therefore, do not plant these close to each other

X means good companions – these plants benefit each other, so you can intermix these vegetables

A - Summer Savory: Companion to beans and onions; deters bean beetles

B - Tansy: Plant under fruit trees; companion to roses and raspberries. Deters flying insects, Japanese beetles, striped cucumber beetles, squash bugs, and ants

C - All strong herbs

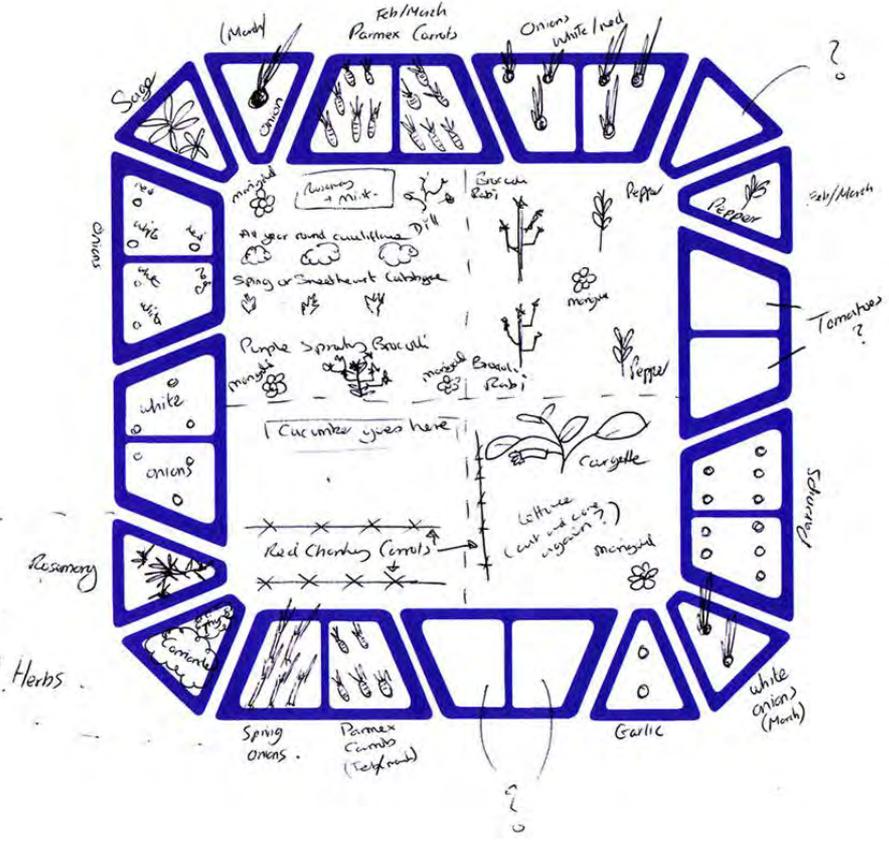
D - Sage: Plant with rosemary, cabbage, and carrots; **dislikes cucumbers**. Deters cabbage moth, carrot fly

E - No strong herbs

F - No hyssop

G - Cauliflower

H - Mint, no fennel



작물	상생식물	상극식물
상치	당근, 무우, 딸기, 양파, 마늘	오이
감자	콩, 옥수수, 양배추, 가지	토마토, 호박, 오이
토마토	당근, 양파, 샐러리, 양배추, 바질, 차이브, 파슬리	감자, 콜라비
가지	콩	
오이	상추, 양배추, 콩	감자
당근	상치, 양파, 대파, 토마토, 완두콩, 세이지, 로즈마리	Dill
시금치	딸기	
딸기	상치, 시금치	양배추
마늘	상치, 캐모마일	완두콩
콩, 완두콩	당근, 오이, 감자, 양배추, 샐러리	양파, 마늘
양배추	샐러리	토마토
양파	딸기, 토마토	완두콩, 콩
대파	콩	

Parsley



Sage



Rosemary



Thyme



Basil



Marigold















옥상텃밭의 장점은?

- 울타리가 없어도 안심! 일광욕과 텃밭가꾸기를 동시에...
- 그늘이 없어서 건물 그늘이 많은 마당보다 작물생육이 양호!
- 텃밭농사는 물주기가 한 노동... 옥상이라면 해 볼만도..
- 날개가 있는 생물을 위한 공중정원...도시공간 속의 비오톱
- 복사열을 줄여 냉방에너지를 조금이라도 낮출 수 있다

옥상텃밭의 원칙

- 생산량이 목적이 아니다.... 뻑뻑하게 심기 없기!
- 방법은 임기응변
- 절반은 요정을 위해 남겨둔다
- 최고의 살충제 SonuroJavara

옥상텃밭 디자인 해보기

