

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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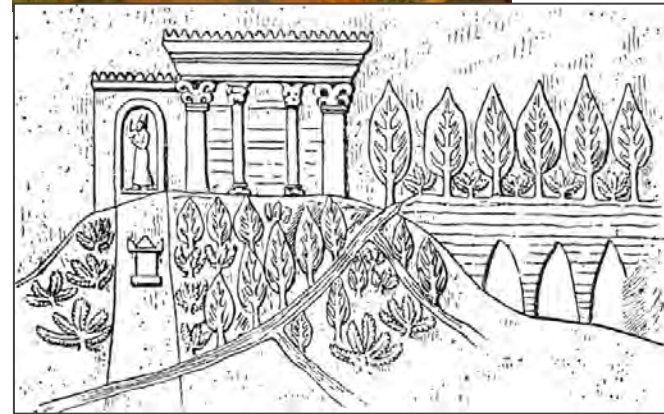
Le laboratoire











고대 바빌론의 공중정원





창세기의 에덴 동산

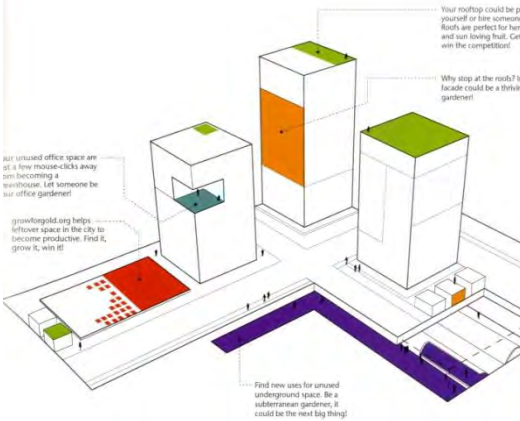
When the Lord God made earth and heaven, there was neither shrub nor plant growing wild upon the earth, because the Lord God had sent no rain....; nor was there any man till the ground...

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.

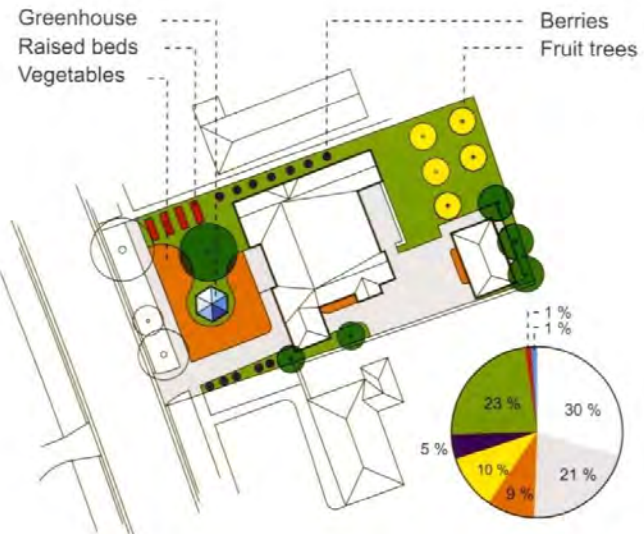
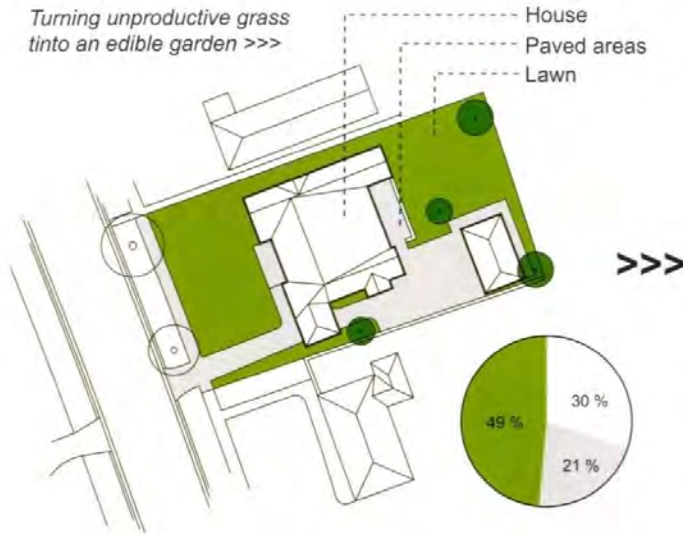




growforgold.org In Your Yard



Turning unproductive grass into an edible garden >>>



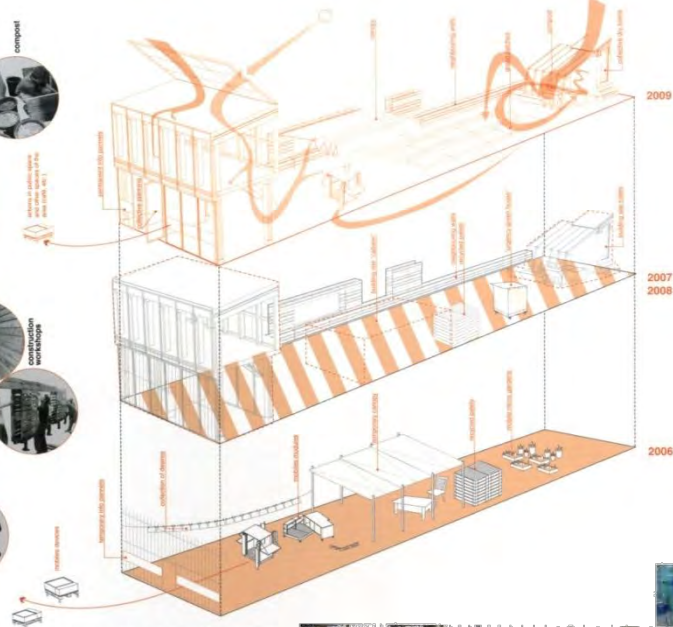
CURRENT USES



'OPEN BUILDING SITE'



INITIAL USES



2009
2007
2008
2006

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





le 5/6
espace culturel et écologique
géré par des habitants
du quartier Saint Blaise

PROJET DE LOI Le 5/6 est un espace culturel et écologique géré par des habitants du quartier Saint Blaise. Ce projet a été initié en 2007 par un collectif d'habitants et de professionnels de la culture et de l'écologie. L'objectif est de créer un lieu de rencontre et de partage pour les habitants du quartier, ainsi qu'un espace de culture et d'écologie.

2007 Le collectif d'habitants et de professionnels de la culture et de l'écologie a initié le projet de loi. L'objectif est de créer un lieu de rencontre et de partage pour les habitants du quartier, ainsi qu'un espace de culture et d'écologie.

2008 Le projet de loi a été soumis à l'avis des habitants du quartier. L'objectif est de créer un lieu de rencontre et de partage pour les habitants du quartier, ainsi qu'un espace de culture et d'écologie.

2009 Le projet de loi a été adopté par les habitants du quartier. L'objectif est de créer un lieu de rencontre et de partage pour les habitants du quartier, ainsi qu'un espace de culture et d'écologie.

2010 Le projet de loi a été mis en œuvre. L'objectif est de créer un lieu de rencontre et de partage pour les habitants du quartier, ainsi qu'un espace de culture et d'écologie.



VOUS AVEZ UNE USER / UN PROJET / VEZ EN PARLER ?
 Contactez-nous au 01 42 51 12 12 ou par email à contact@le56.org

Appel à témoignage:
vos pratiques et votre vision du Jardin
partagé dans la ville
 (portrait photographique du lieu)

par l'initiative de l'atelier d'architecture urbaine - aa3

SEANCE D'AUTO-PORTRAITS PENDANT L'AMAP
MERCREDI 2 SEPTEMBRE 2009
DE 17H30 À 19H30
 Un dispositif photographique scénarisé en place
 et à votre disposition

Venez seul en famille, à plusieurs
 ou encore avec votre lycéar celui de Prévert



pour en savoir plus :
 * sur le photographique : www.gardenofthealley.com
 * sur aa3 : www.tafractu.org







극락초등학교 생명텃밭.광주전남귀농학교



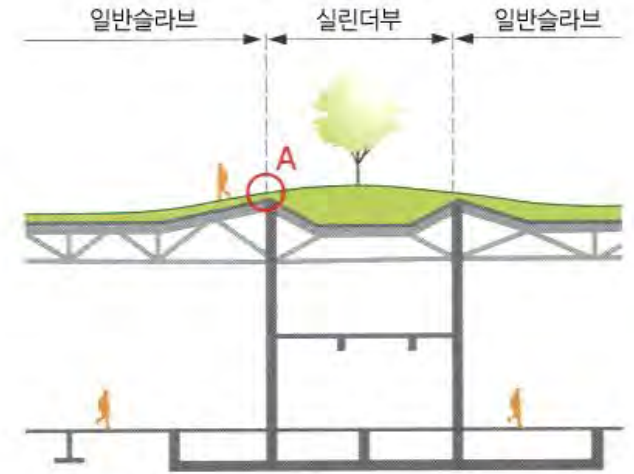




국영 쇼와기념공원 하나미도리문화센터

도쿄도 다치가와시, 2005

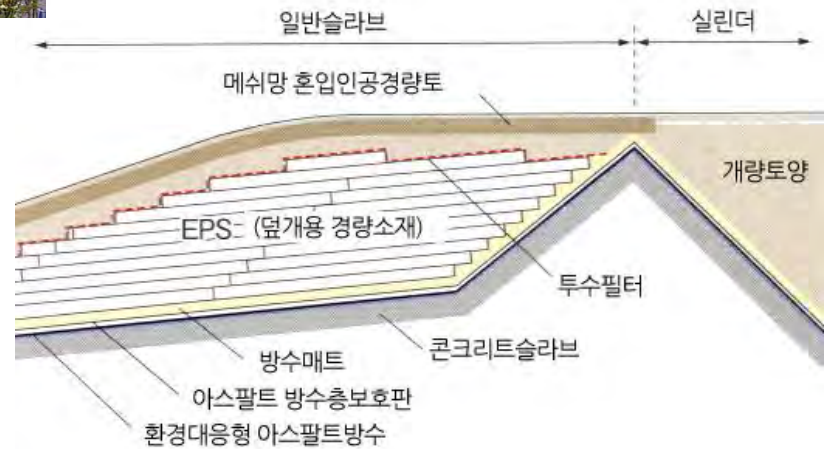




단면개념도



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

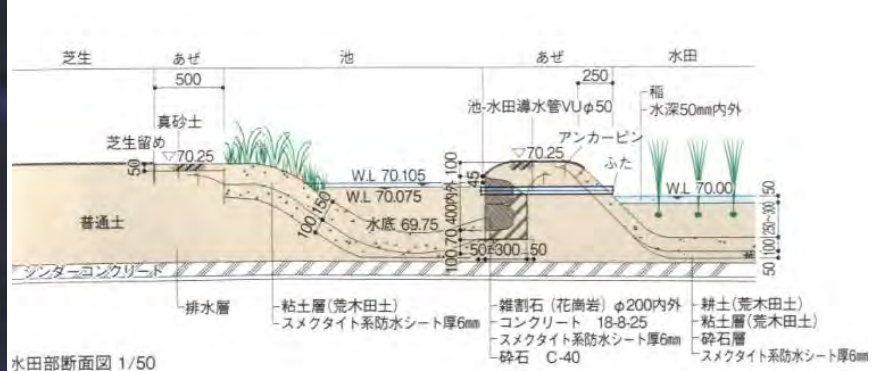
1,350m²



록본기 힐즈의 옥상 논정원

東京都 港区 六本木 6丁目, 2003

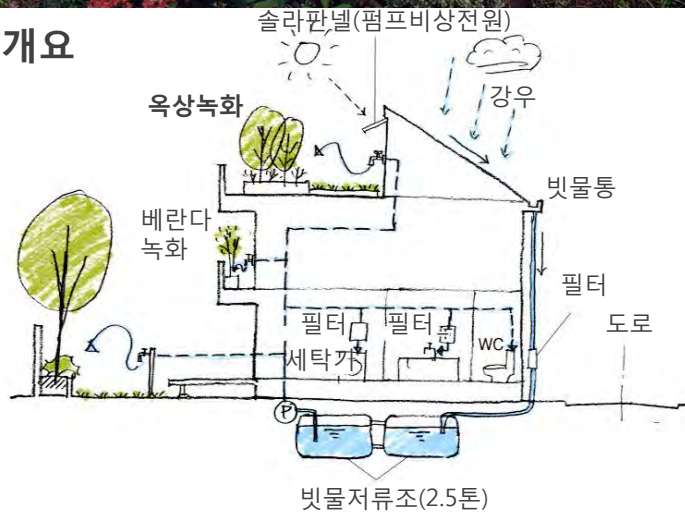
시네마컴플렉스 8층 옥상(1,300m²중 논면적은 100m²)



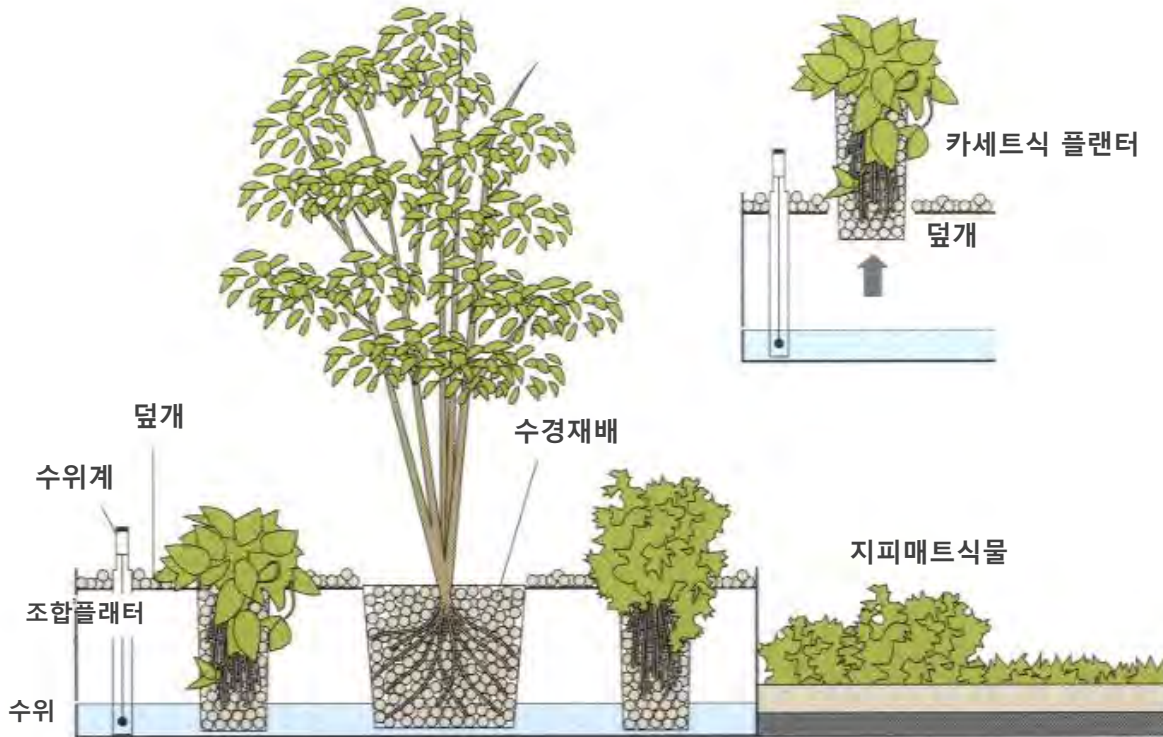
水田部断面図 1/50



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

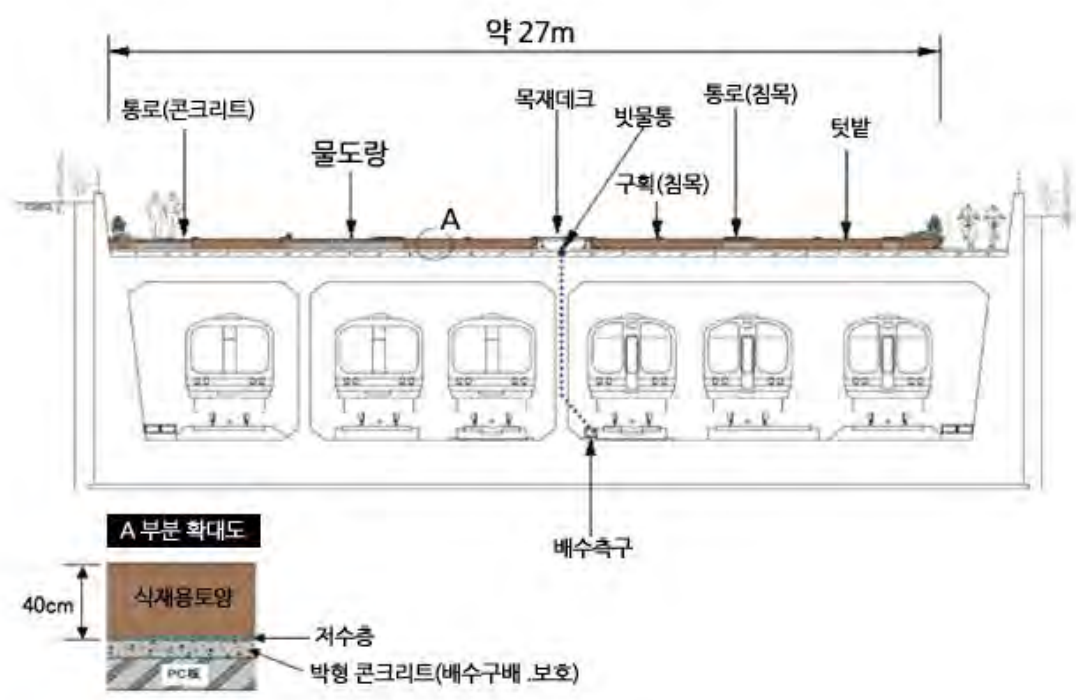
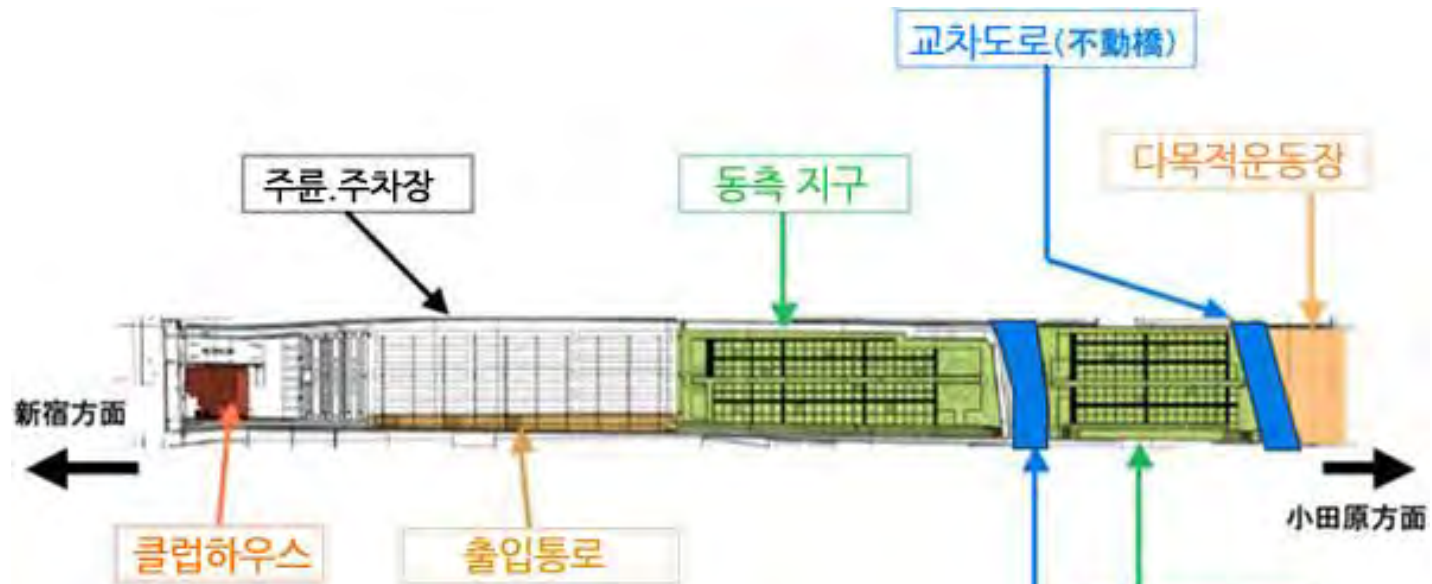


アグリス成城 「AGRIS SEIJO」 プロジェクト









도시농부의 작업실

2012. 4. 5 - 2012. 5. 20

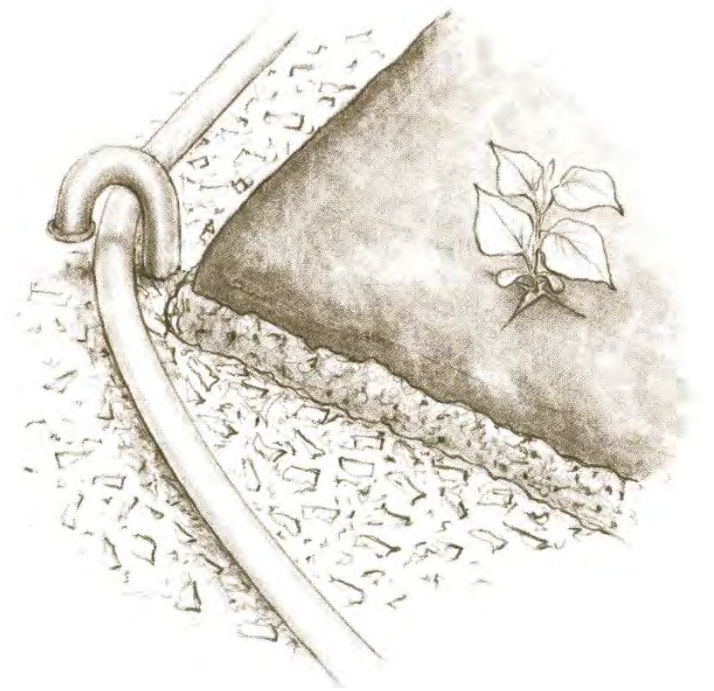
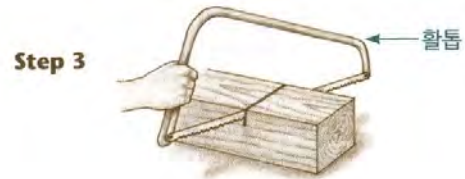


한국공예.디자인문화진흥원





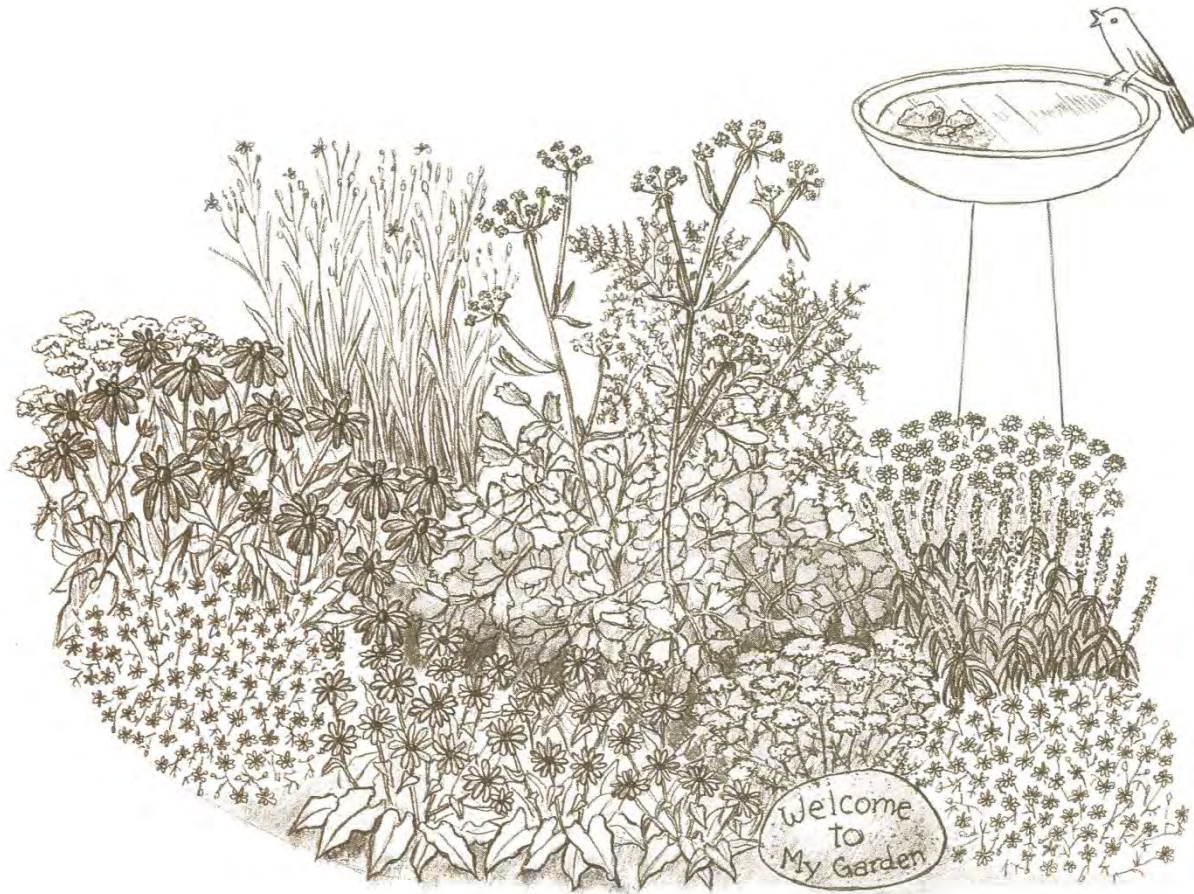
간단한 텃밭만들기



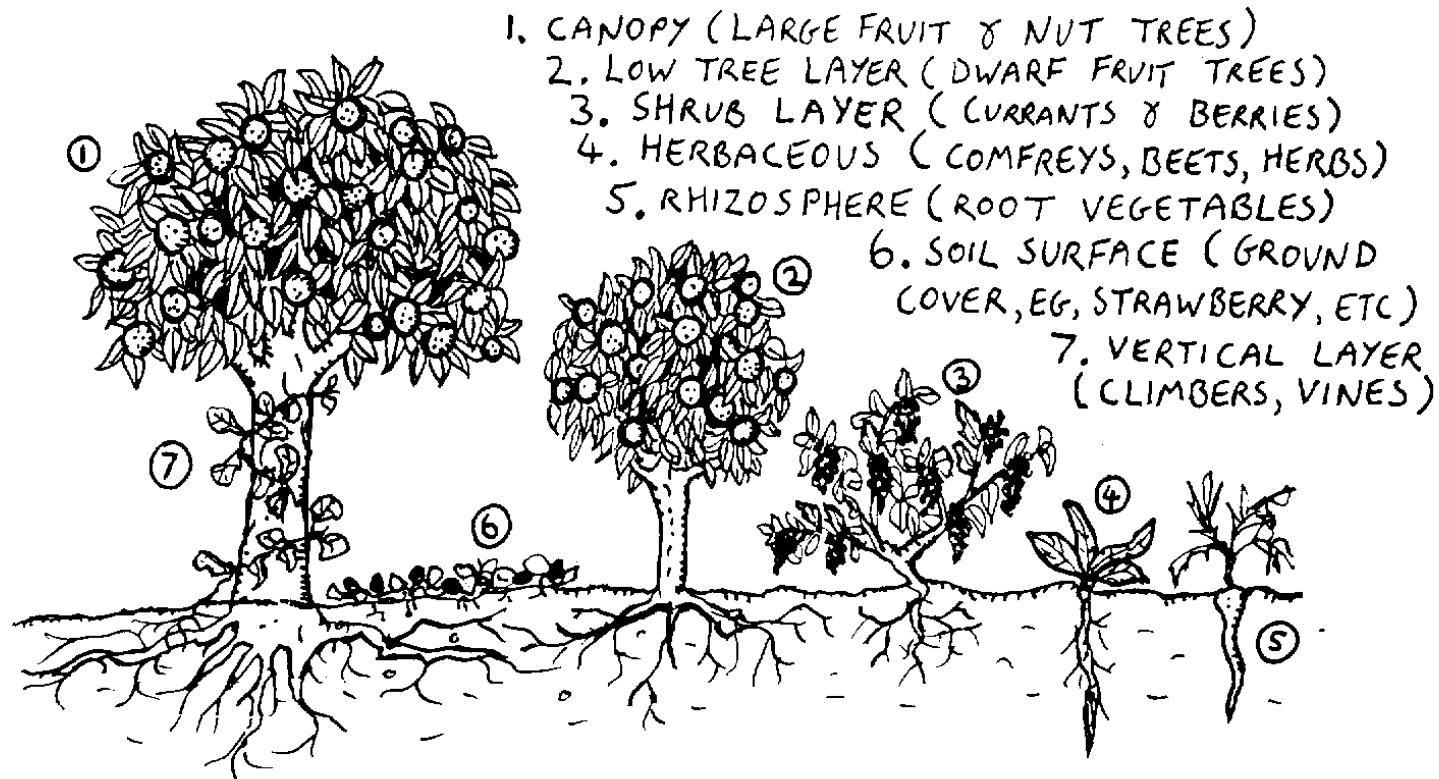




텃밭정원에의 초대 welcome garden 도 만들어 보자



정원에서든 숲을 만들어보자



THE FOREST GARDEN: A SEVEN LEVEL BENEFICIAL GUILD



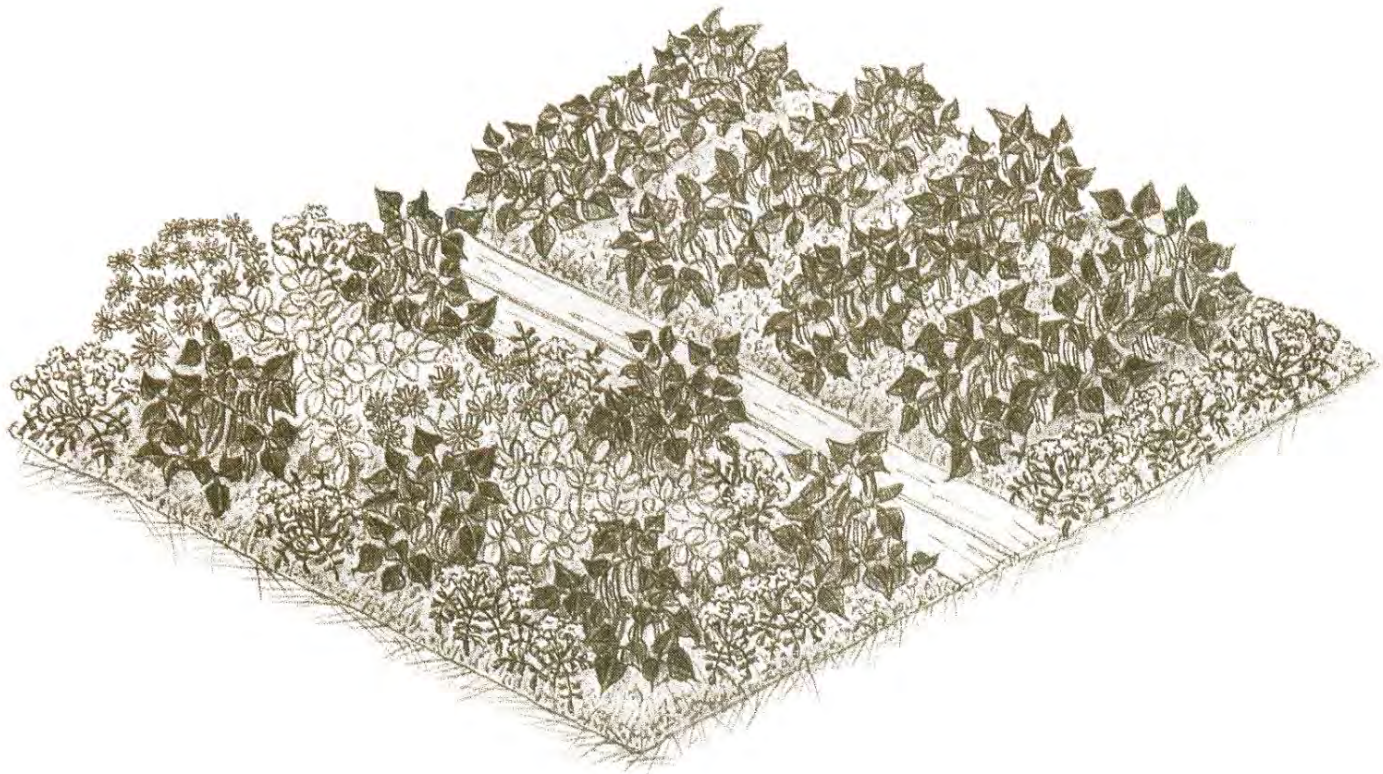
美しいだけじゃつまらない、おいしく暮らそう

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...!?





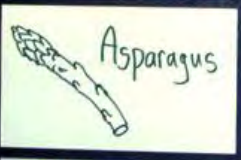
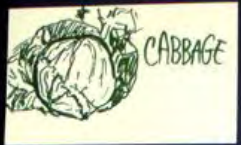
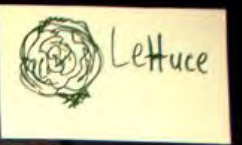
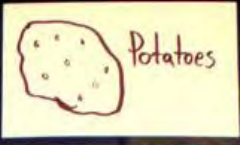


Love: Peas, Lettuce,
Chives, onions, Leeks
radishes, tomatoes

HATE: Dill

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

HATE: Potatoes, cabbage, Corn



A BASIC GUIDE TO

COMPANION PLANTING



Companion planting is the art of growing different plants together to benefit each other. It is a technique used by gardeners to improve the health and productivity of their plants. Companion plants can help repel pests, attract beneficial insects, and improve soil fertility. This guide provides a comprehensive overview of companion planting, including a list of plants that are known to be beneficial to various crops. The central grid shows the specific combinations of plants that are most effective for each crop. The left and right sides of the grid list the plants that are used in each combination. The bottom of the grid lists the crops that are being protected or benefited by the companion plants. The top of the grid lists the specific plants that are used in each combination. The grid is organized into columns for each crop and rows for each plant combination. The plants are listed in alphabetical order within each column and row. The grid is a valuable tool for gardeners who want to improve the health and productivity of their plants. It provides a clear and concise overview of the many different ways that plants can be used together to benefit each other. The grid is easy to use and understand, and it provides a wealth of information that is essential for any gardener who is serious about companion planting. The grid is a must-have for any gardener who wants to improve the health and productivity of their plants. It provides a clear and concise overview of the many different ways that plants can be used together to benefit each other. The grid is easy to use and understand, and it provides a wealth of information that is essential for any gardener who is serious about companion planting.

Handwritten title: Companion Planting

Crop	Plant	Benefit
CUCUMBERS	Garlic	Repels cucumber beetles
	Onion	Repels cucumber beetles
	Carrot	Repels cucumber beetles
	Cherry	Repels cucumber beetles
	Chive	Repels cucumber beetles
	Yarrow	Repels cucumber beetles
	Marigold	Repels cucumber beetles
	Neem	Repels cucumber beetles
	Comfrey	Repels cucumber beetles
	Herbaceous	Repels cucumber beetles
TOMATOES	Garlic	Repels hornworms
	Onion	Repels hornworms
	Carrot	Repels hornworms
	Cherry	Repels hornworms
	Chive	Repels hornworms
	Yarrow	Repels hornworms
	Marigold	Repels hornworms
	Neem	Repels hornworms
	Comfrey	Repels hornworms
	Herbaceous	Repels hornworms
PEPPERS	Garlic	Repels pepper weevils
	Onion	Repels pepper weevils
	Carrot	Repels pepper weevils
	Cherry	Repels pepper weevils
	Chive	Repels pepper weevils
	Yarrow	Repels pepper weevils
	Marigold	Repels pepper weevils
	Neem	Repels pepper weevils
	Comfrey	Repels pepper weevils
	Herbaceous	Repels pepper weevils
EGGSPLANTS	Garlic	Repels eggplant beetles
	Onion	Repels eggplant beetles
	Carrot	Repels eggplant beetles
	Cherry	Repels eggplant beetles
	Chive	Repels eggplant beetles
	Yarrow	Repels eggplant beetles
	Marigold	Repels eggplant beetles
	Neem	Repels eggplant beetles
	Comfrey	Repels eggplant beetles
	Herbaceous	Repels eggplant beetles

- Insect Beneficials**
- ANTS - *Lasius niger*, *Formica ruginodis*
 - APHIDS - *Acyrthosiphon pisum*, *Trialeurodes vaporariorum*
 - CARABID BEETLES - *Chlaenius* spp.
 - CATERPILLARS - *Pieris rapae*, *Agrotis* spp.
 - FLIES - *Musca domestica*, *Stomoxys calcitrans*
 - FLIES - *Calliphora vicina*, *Tabanus* spp.
 - FRUIT FLIES - *Drosophila melanogaster*
 - FUNGUS - *Trichoderma reesei*, *Aspergillus* spp.
 - WEEVIL - *Curculio* spp.
 - WORM - *Agrotis* spp.
 - MOSQUITO - *Culex* spp.
 - NEMATODE - *Caenorhabditis elegans*
 - RED SPIDER - *Tetranychus* spp.
 - SLUG - *Limax* spp.
 - SARLETS - *Chrysomelids*
 - THrips - *Thrips* spp.
 - TOMATO WORM - *Manduca* spp.
 - WEEVIL - *Curculio* spp.
 - WHITE FLY - *Trialeurodes vaporariorum*

Citrus
 National Association of Sustainable
 Agriculture
 200 New York Avenue, NW, Room 4000
 Washington, DC 20004
 202-462-6080
 www.nasaa.org
 Organic Agriculture and Consumer Action
 1000 Vermont Avenue
 Washington, DC 20005
 202-462-6080

For Further Reading
 Companion Planting and How to Use It -
 Nancy J. Phillips
 Companion Planting -
 The Organic Gardener's Bible
 Companion Planting in Australia -
 Brenda Little



ROSA PRODUCTS
 P.O. Box 2407
 1501 1st St., Suite 200
 Berkeley, CA 94701
 Phone: 415.863.3665
 Fax: 415.863.3666
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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

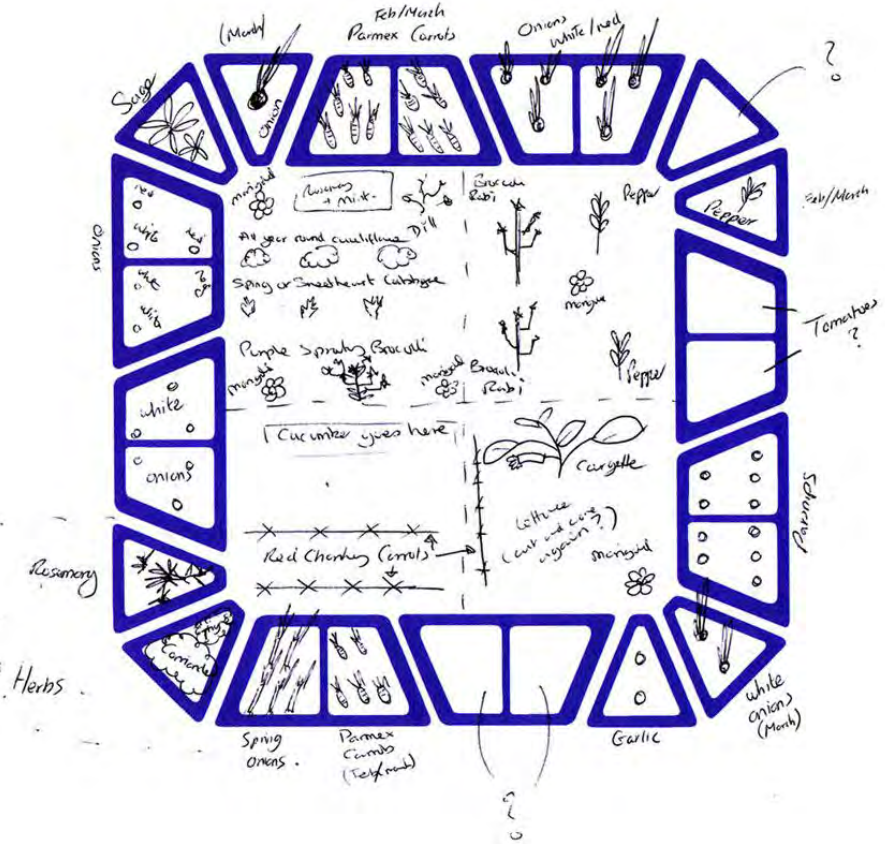
D - Sage: Plant with rosemary, cabbage, and carrots; **dislikes cucumbers**. Deters cabbage moth, carrot fly

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

