traditional NM seed saving

native methods

maintain genetic diversity

high plant population

- maximum diversity of pollen & ovules

- seed w/full range of varietal genetic diversity

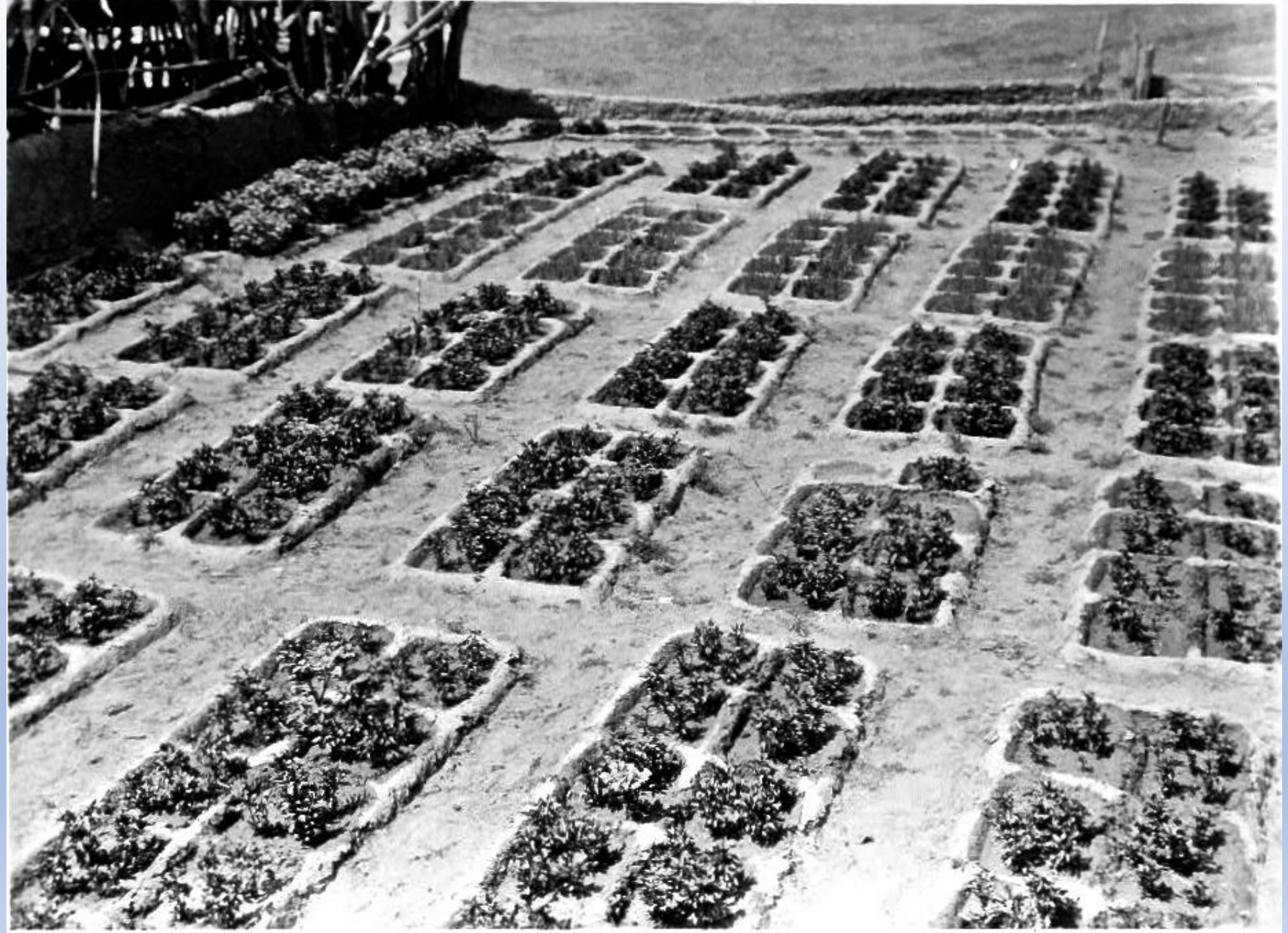
Hopi corn field

- **deep sand requires deep planting**
- **deep planting requires multiple seeds per hole**
- **larger population = increased genetic diversity**

chile nativo

- direct-seeded
- high-clay soil compaction requires multiple seeds per hole
- larger plant population = increased genetic diversity

http://www.savenmseeds.org/



four species of squash commonly raised in North America which *DO NOT* readily cross

Cucurbita maxima includes Hubbard, Turban, Buttercup…

Cucurbita moschata includes Butternut, Tahitian…

Cucurbita mixta (aka *agyrosperma*) includes all Cushaws…

Cucurbita pepo includes yellow summer, Zucchini, Pattypan, Halloween Pumpkin , Delicata…

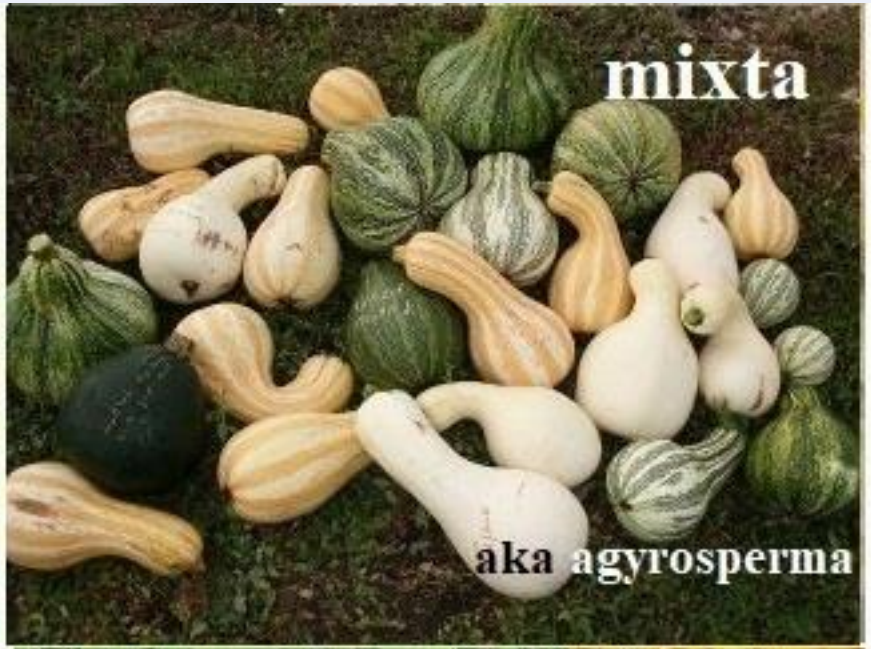
also crosses with small decorative gourds

SQUASH

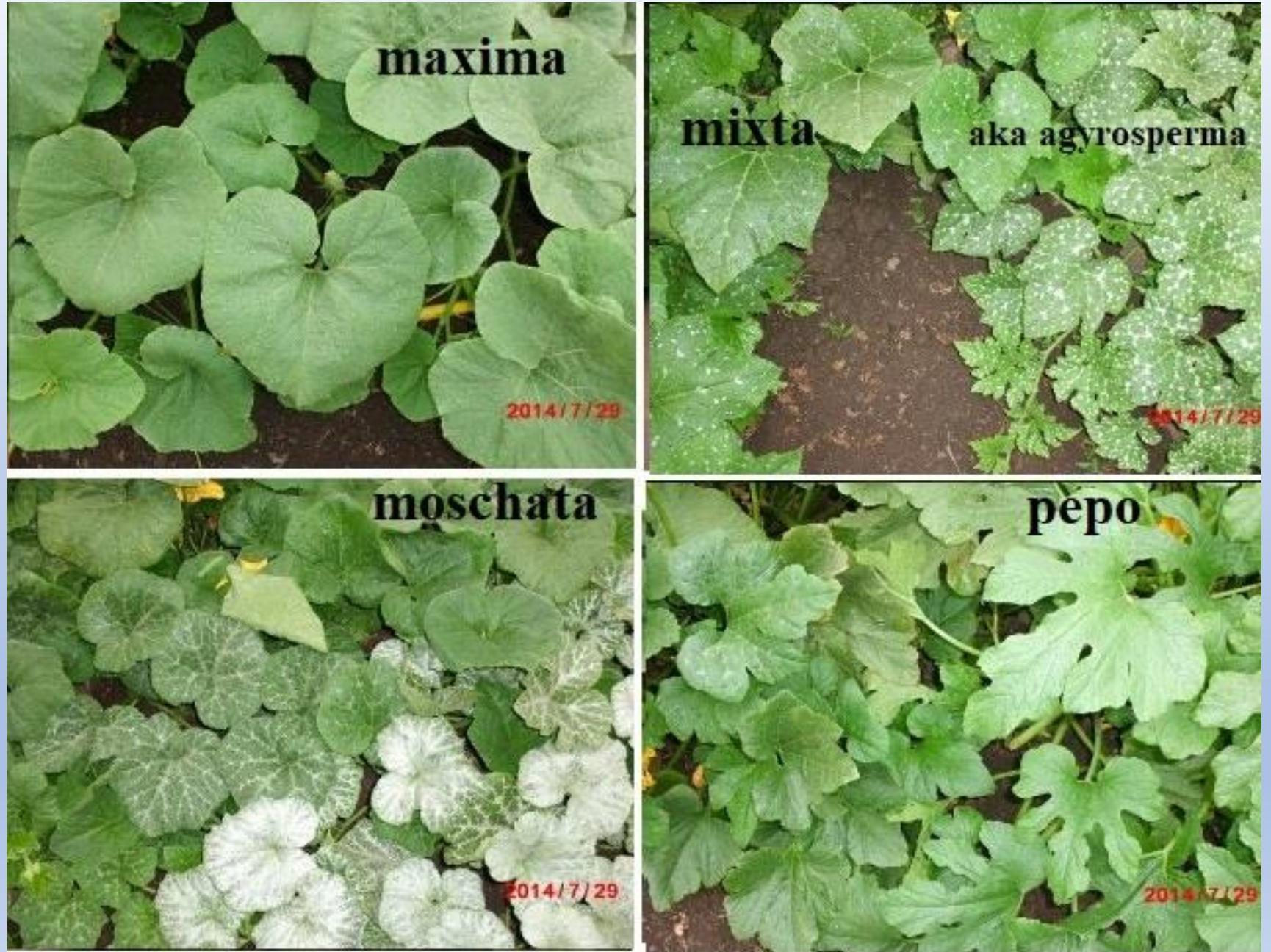
FAMILY *Curcurbitaceae* GENUS *Cucurbita* SPECIES *sp.*

POLLINATION insects ISOLATION DISTANCE ½ mile or more

typical fruit types by species



typical leaves by species



typical flowers by species

typical peduncles by species

typical seed types by species

BEANS, common

FAMILY *Fabaceae* GENUS Phaseolus SPECIES *vulgaris*

POLLINATION insects ISOLATION DISTANCE 20 – 100 feet

NONE of these legumes will cross with each other

Cicer arietinum **garbanzo**
Glycine max **soy bean**
Lens esculenta **lentil**
Phaseolus acutifolius **tepary**
Phaseolus coccineus **runner**
Phaseolus lunatus **lima**
Phaseolus vulgaris **common**
Pisum sativum **pea**
Vicia faba **fava**
Vigna unguiculata **cowpea/blackeye**

BARRIERS to deflect and slow pollinators

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plant these as an intervening crop, as a wall, or as a surrounding “room”:

- **grain (not forage) sorghum**
- **sunflower**
- **corn**

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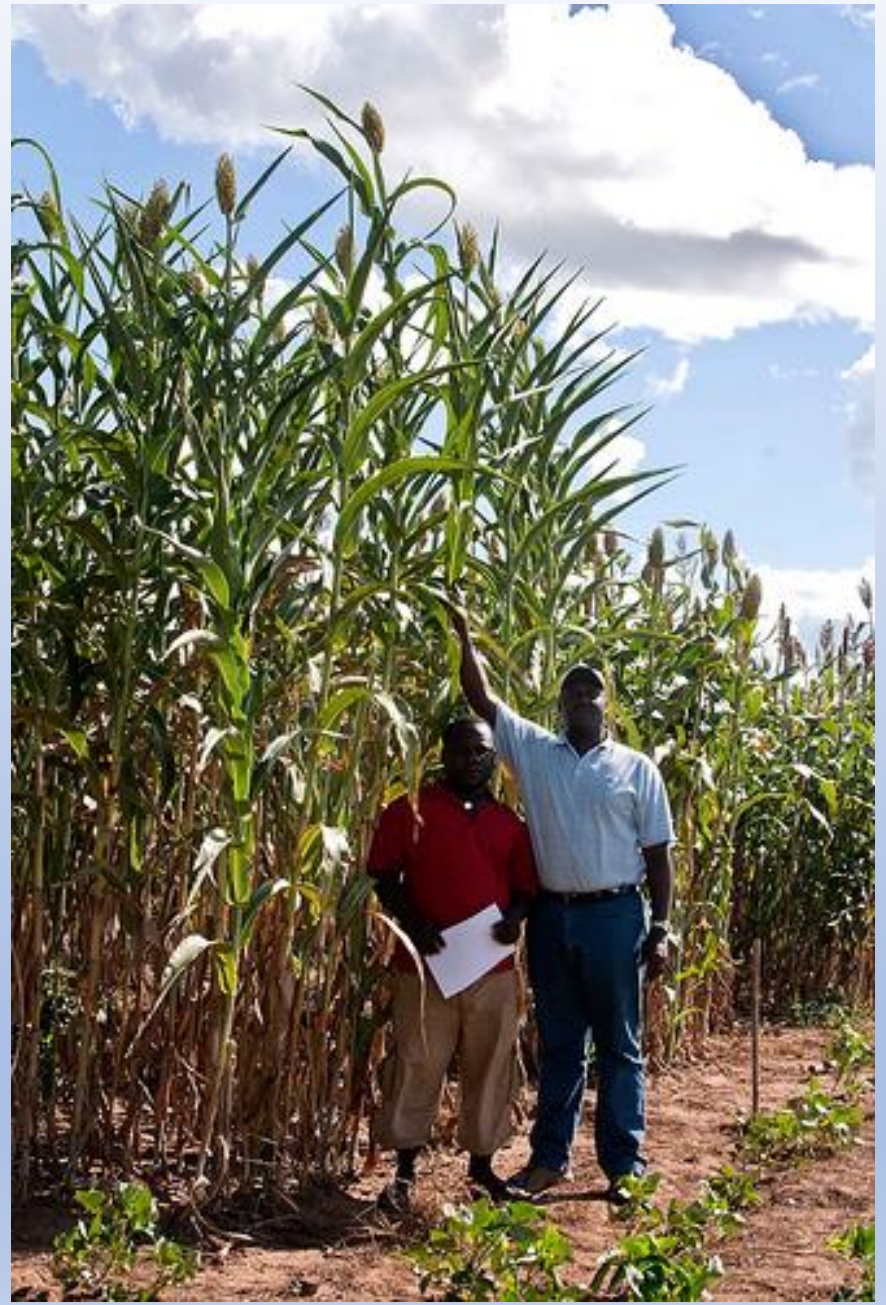
make use of buildings, walls and natural features



12 PLANT FAMILIES OUT OF 1000s

ASTERACEAE artichoke, lettuce, sunflower, sunchokes
AMARYLLIDACEAE chives, garlic, leeks, onions, shallots
BRASSICAACEAE broccoli, cauliflower, collards, kale, mustards, turnip
CHENOPODIACEAE beets, quinoa, spinach
CUCURBITACEAE cucumbers, melons, squash, watermelons
FABACEAE beans, peanuts, peas
LABIATAE basil, mint, thyme, etc
MALVACEAE okra, cottonseed
POACEAE barley, corn, millet, rice, rye, sorghum, wheat
ROSACEAE almonds, apples, blackberry, cherry, nectarines, peaches, pears, plums, raspberry, rose, strawberry
SOLANACEAE eggplant, peppers, potatoes, tomatoes
UMBELLIFERAE carrots, dill, fennel, parsnips
VITACEAE grapes