


Le coton dans l'Ancien Monde : domestication, culture, usage et commerce
Cotton in the Old World: domestication, cultivation, use and trade
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Evolution et domestication des cotons diploïdes cultivés : données de la génétique moléculaire et l'agronomie

Evolution and domestication of diploid cultivated cottons: molecular genetics and agronomic evidence

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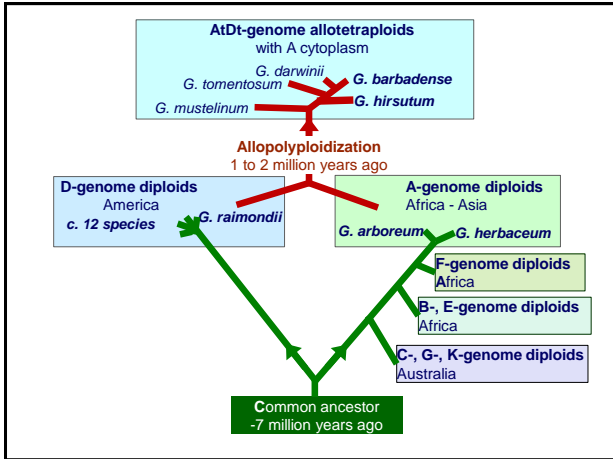
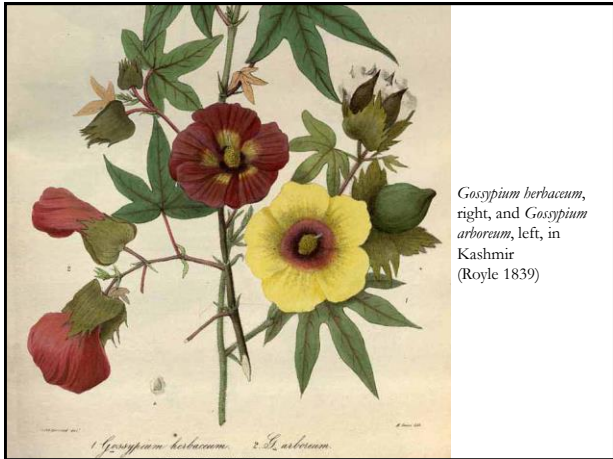
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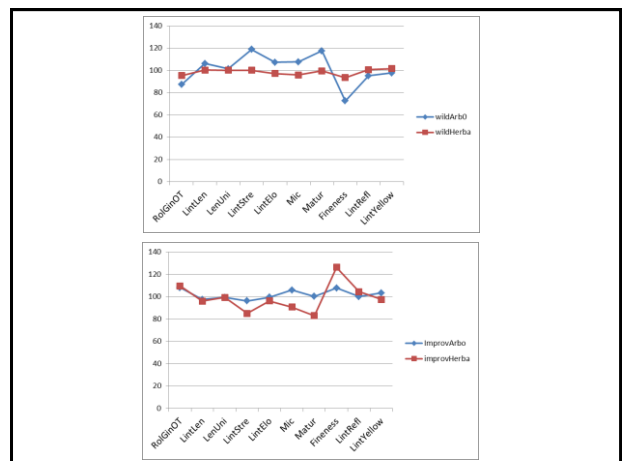
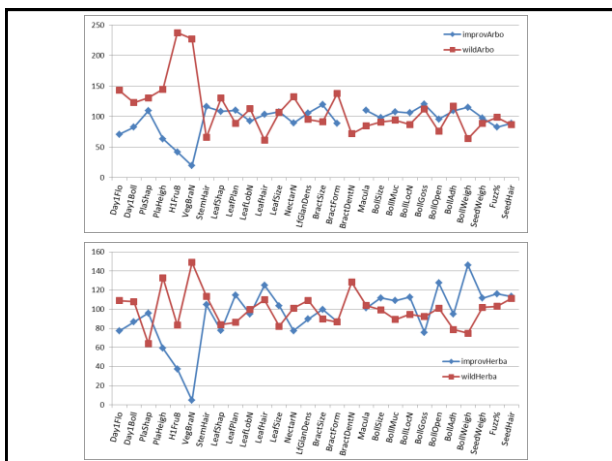
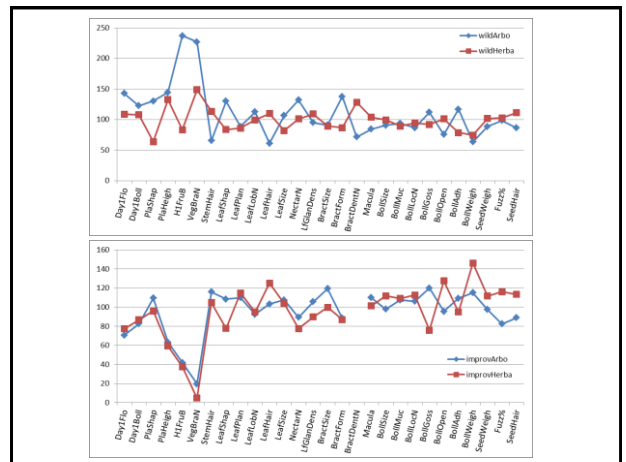
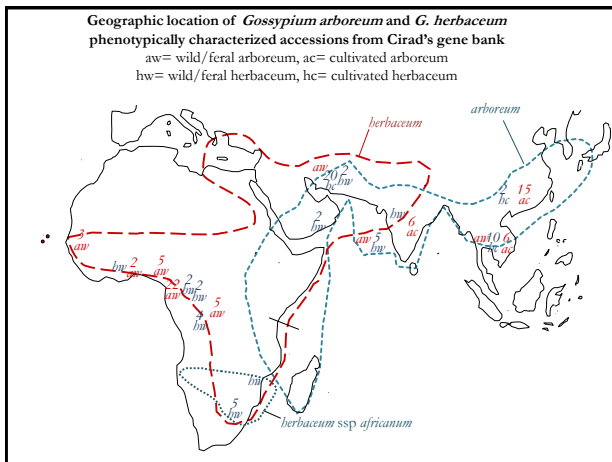
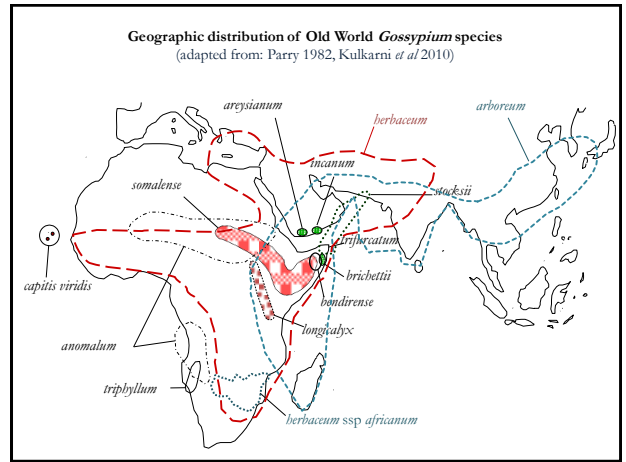
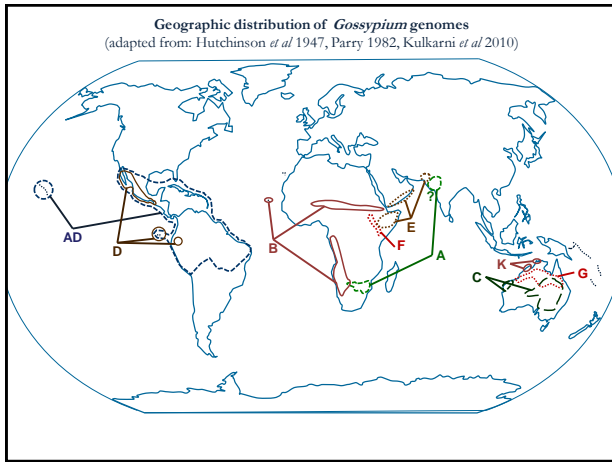
Abstract

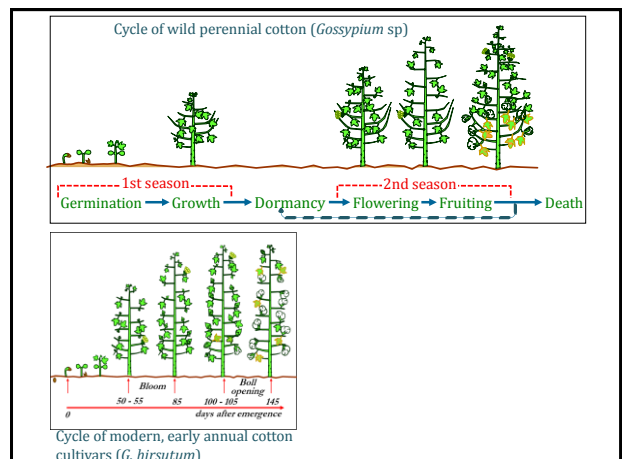
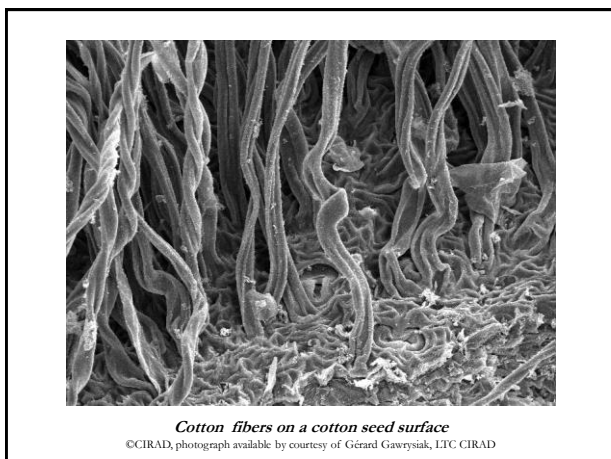
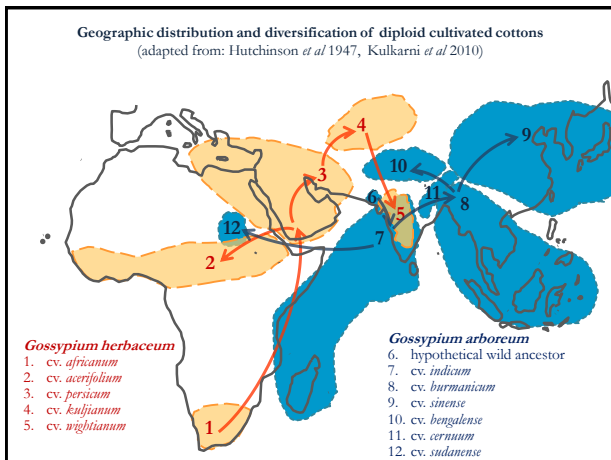
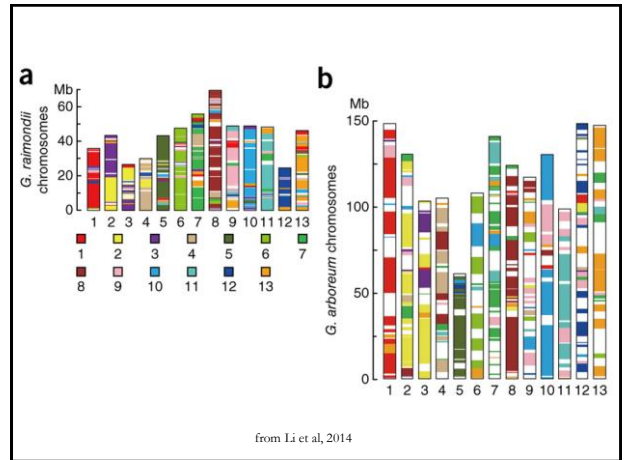
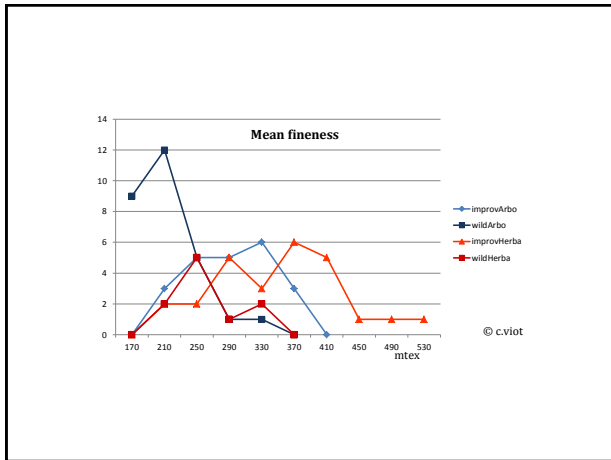
The Old World cotton species *Gossypium arboreum* (Tree Cotton) and *G. herbaceum* (Levant Cotton) have been cultivated in Asia, Near East and Africa for thousands of years. They are sister-species, more or less difficult to distinguish with certainty. Phenotyping of wild/feral and traditional cultivated gene bank accessions shows overlapping distributions for plant and fibre traits. Human selection pressure appears evident on plant earliness, compact architecture, and higher boll and seed weights in particular. Fibre traits appear very similar between cultivated types of both species for length and colour, possibly as these traits were more easily selected for in traditional systems, but fibre length appears rather short in most-diffused traditional cultivars, while there existed and still exist high quality cultivars, for instance in *G. arboreum*. The respective traditional growing areas of these two species could result either from initial historic circumstances or from differential adaptations, but no precise data has been found in support of the latter hypothesis.

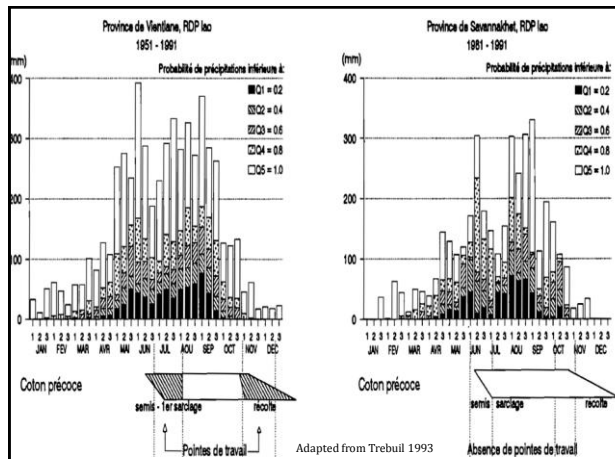
Résumé

Les cotons cultivés de l'Ancien Monde *Gossypium arboreum* et *G. herbaceum* ont été cultivés en Asie, Proche-Orient et Afrique depuis au moins 8000 ans. Ces deux espèces-sœurs sont plus ou moins difficiles à distinguer avec certitude. Le phénotypage d'accèsions sauvages/ férales et de cultivars traditionnels en banque de gène montre des distributions chevauchantes pour la morphologie des plants et la qualité de la fibre. L'effet de la sélection humaine est évident sur la précocité et compacité des plants, et sur le poids supérieur des capsules et graines en particulier. Les caractéristiques de fibre apparaissent très similaires entre les types cultivés des deux espèces pour longueur et couleur, possiblement car ces traits sont de sélection plus facile en système traditionnel, mais la longueur de fibre est plutôt courte chez la majorité des cultivars traditionnels, alors qu'il a existé, et existe toujours, des cultivars de haute qualité, en particulier chez *G. arboreum*. Les aires de culture traditionnelles respectives de ces deux espèces pourraient résulter des circonstances historiques initiales ou d'adaptations différencées, mais aucune donnée précise n'a été trouvée en faveur de la seconde hypothèse.









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