

From Nature to Culture

(Example on Barley)

Cultivated Barley (*Hordeum vulgare*) originated from two-rowed wild Barley (*Hordeum spontaneum*) by several mutations for setting stable spikes, high yield and so on. Through this process we can see the intermediate form as *H. agriocrithon*. They are referred to nowadays as weeds in fields of Barley and Wheat. They keep isolated by time flowering and maturity, usually earlier than cultivated one. Occasionally they have introgression with cultivated to complete gene flow from wild to cultivated with positive characteristics.

Slide 1: Map of distribution

" 2: Close-up picture of spike

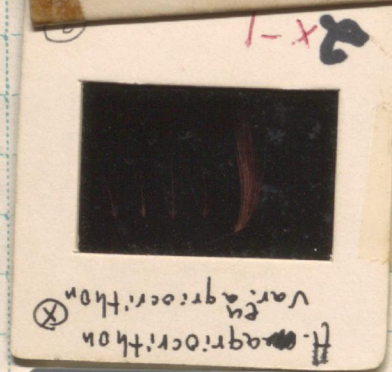
" 3: Karyotype $2n=14$

" 4: Wild Barley *H. spontaneum* & *H. agriocrithon* in Barley field

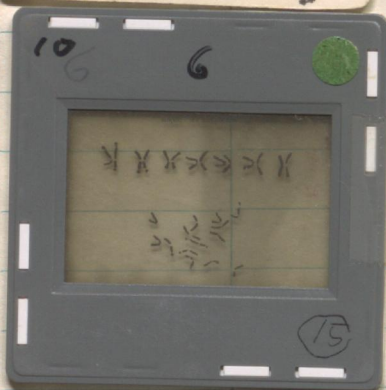
" 5: International group of Scientists observed this case in the field of Tibet.



#1



#2



#3



#4



#5

#1



From Nature to Culture

#1

(Example on wheat)

#2



#2

Common wheat (*Triticum aestivum*) is a hexaploid form, originated by intergenerational hybridization. Even in this case, a new primitive hexaploid form passed for long time, gradually under cultivation, domestication became Modern wheat.

#3

#3

Triticum aestivum, subsp. tibetanum
 Slide 1 - Map of geographical distribution
 Slide 2 - closed up show, Broken end spike
 Slide 3 - " "
 Slide 4 - tibetanum in the field, at maturity, a natural sawing is made by winds
 Slide 5 - tibetanum is a hexaploids

#4

#5



#5