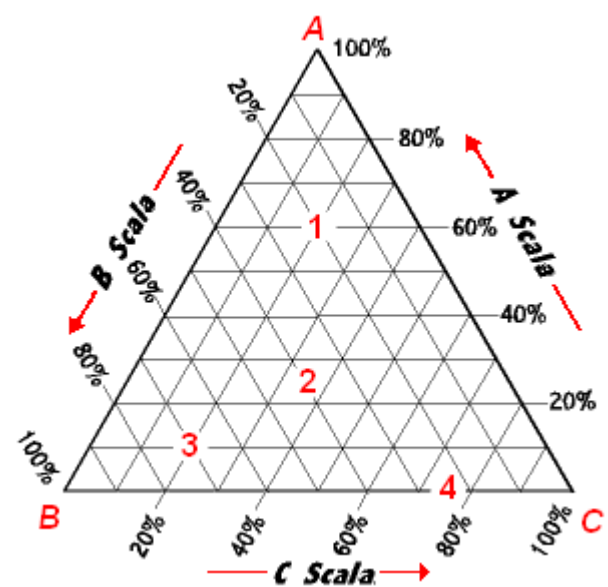
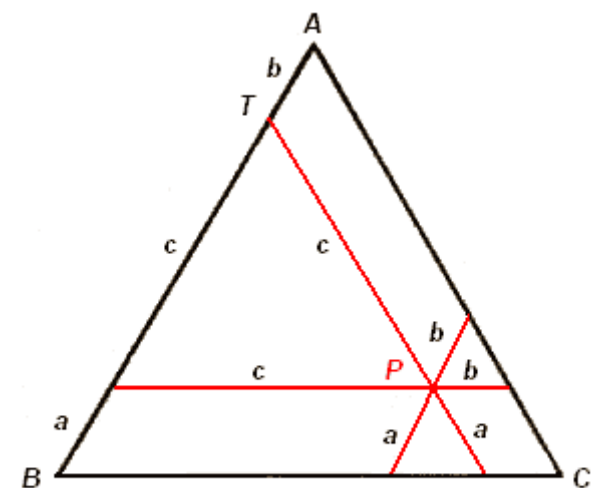


Diagrammi triangolari



punto	<i>A</i>	<i>B</i>	<i>C</i>	totale
1	60%	20%	20%	100
2	25%	40%	35%	100
3	10%	70%	20%	100
4	0%	25%	75%	100



Explanation

WBP within-plate basalts
IAT island-arc tholeiites
CAB calc-alkaline basalts
MORB mid-ocean ridge basalts
OIT ocean island tholeiite
OIA ocean island alkaline basalt

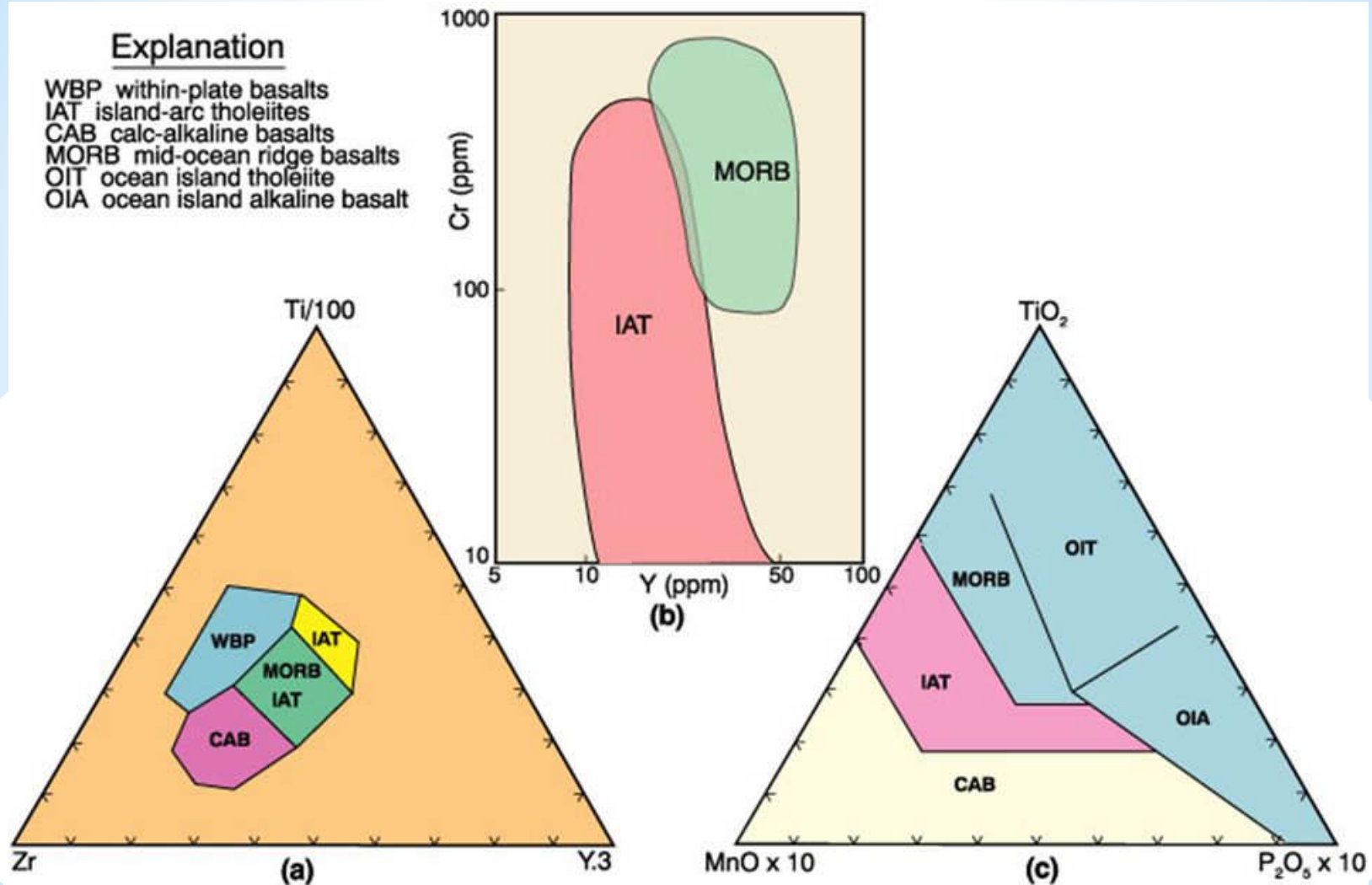
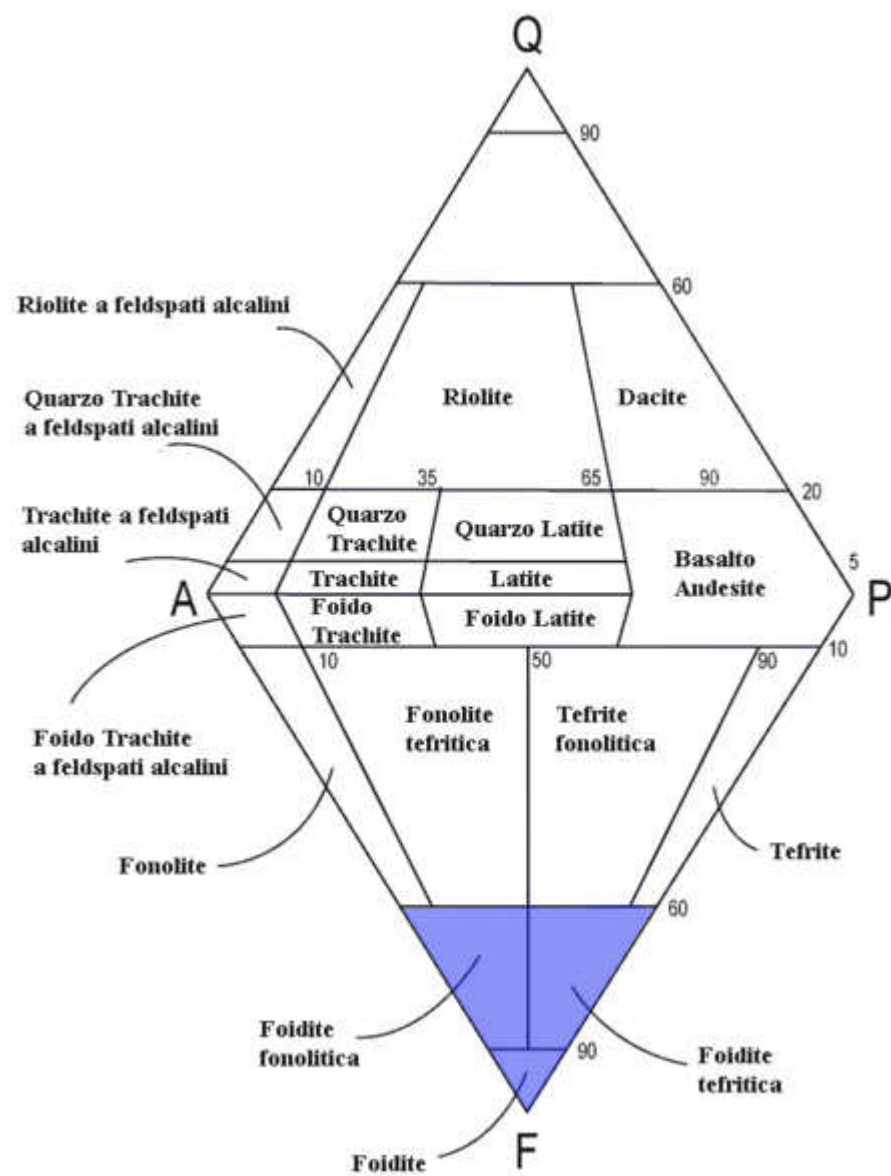
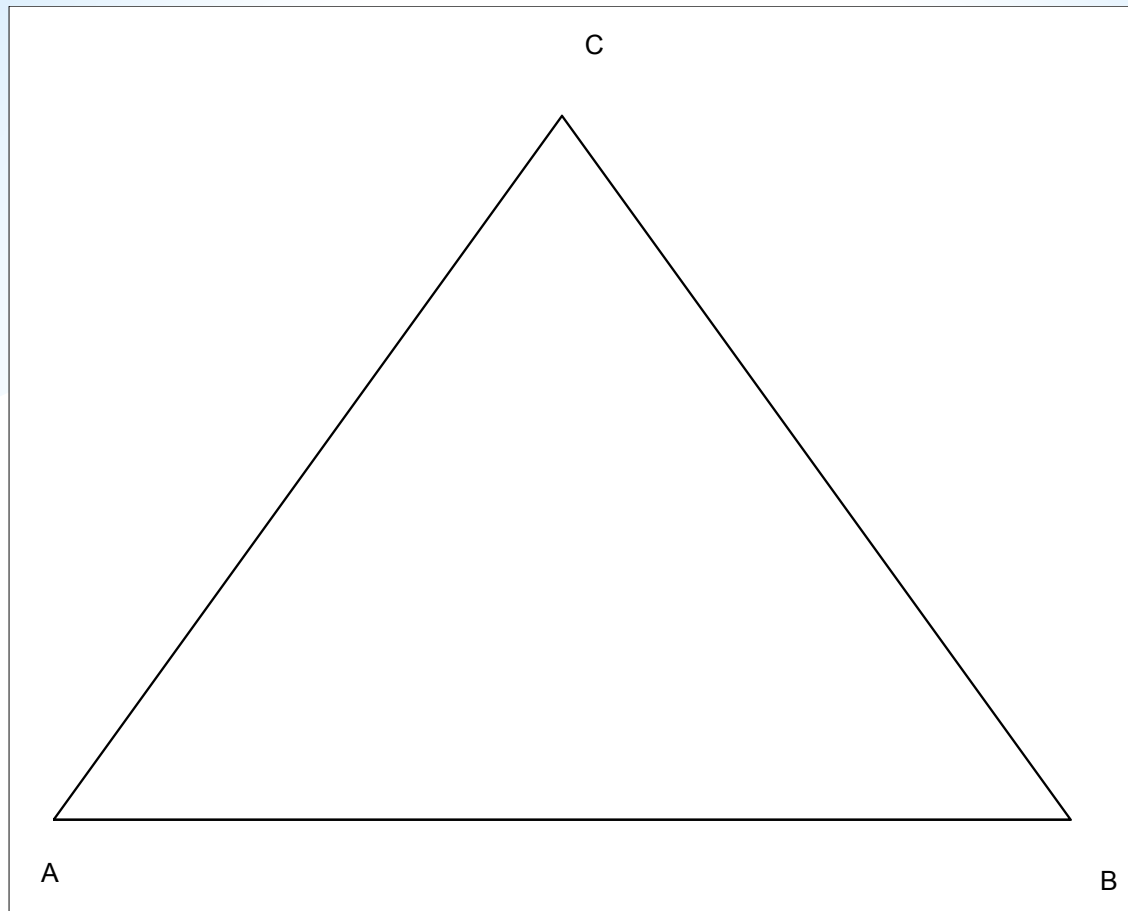


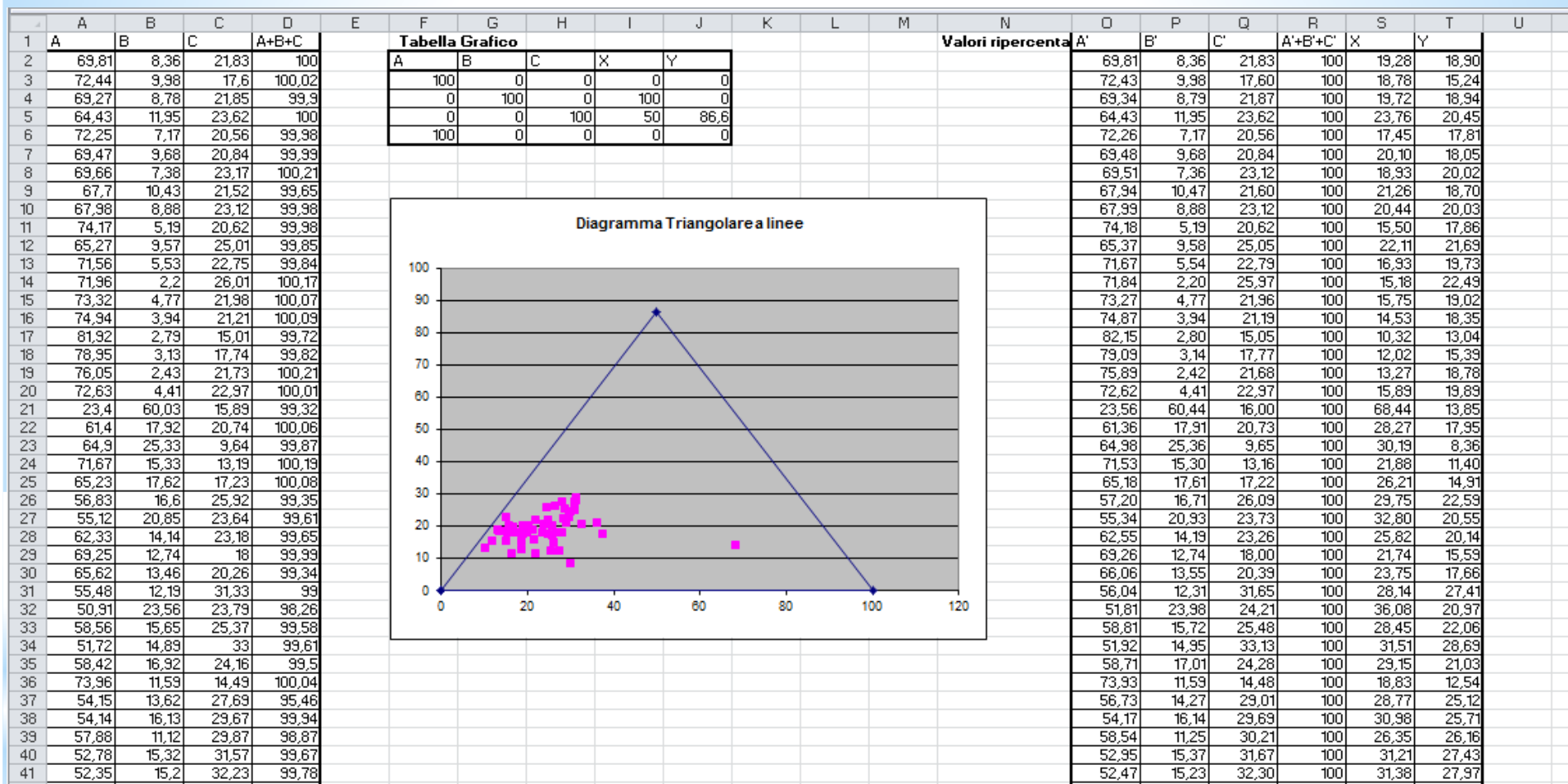
Figure 9-8. (a) after Pearce and Cann (1973), *Earth Planet. Sci. Lett.*, **19**, 290-300. (b) after Pearce (1982) in Thorpe (ed.), *Andesites: Orogenic andesites and related rocks*. Wiley, Chichester, pp. 525-548, Coish et al. (1986), *Amer. J. Sci.*, **286**, 1-28. (c) after Mullen (1983), *Earth Planet. Sci. Lett.*, **62**, 53-62.

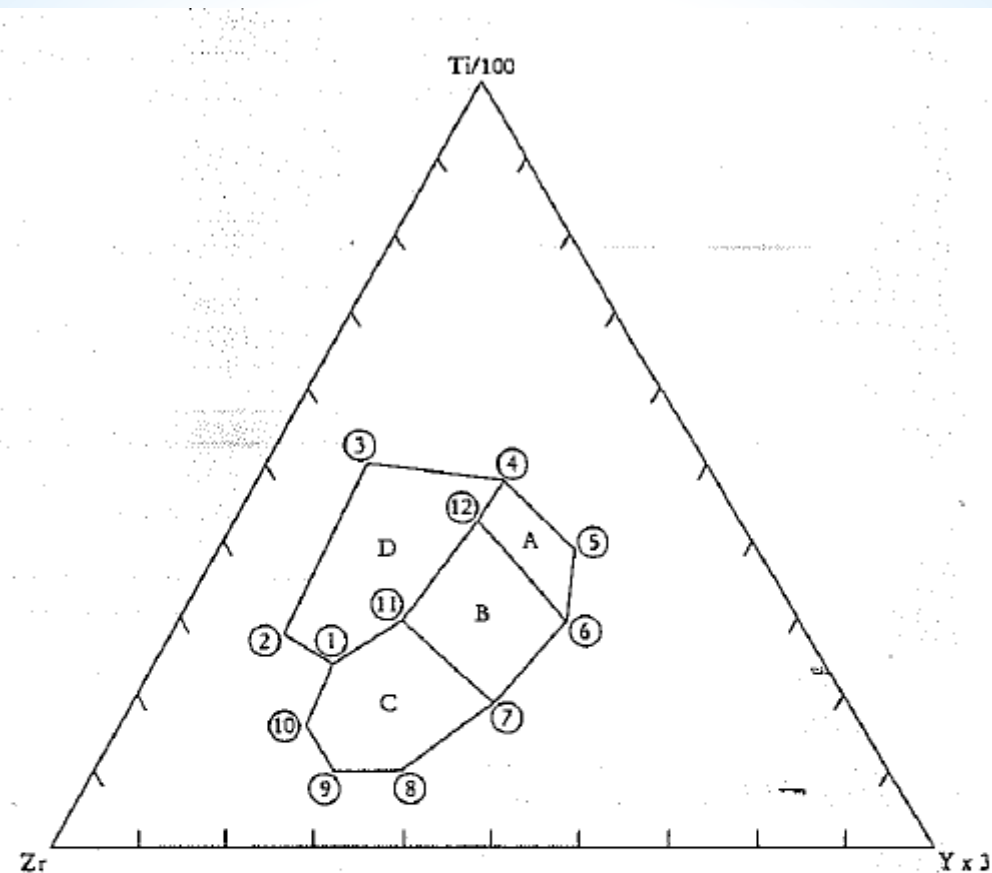




$$X = B + C / 2$$

$$Y = C * 0,866$$





The Ti-Zr-Y discrimination diagram for basalts (after Pearce and Cann, 1973). A is the field of island-arc tholeiites, C the field of calc-alkali basalts, D is the field of within-plate basalts and B is the field of MORB, island-arc tholeiites and calc-alkali basalts. Rocks which plot in field B give an ambiguous result but can be separated by plotting on a Ti-Zr diagram (Figure 5.2) or if unaltered on a Ti-Zr-Sr diagram (Figure 5.3). The plotting coordinates, extracted from Pearce and Cann (1973 — Figure 3) are:

Point	Ti/100	Zr	Y x 3	Point	Ti/100	Zr	Y x 3
1	24	55.5	20.5	7	19	40	41
2	28	59	13	8	10	55	35
3	50	38.5	11.5	9	10	62.5	27.5
4	48	24	28	10	16	63	21
5	39	20.5	40.5	11	29.5	45	25.5
6	30	26	44	12	42.5	30	37.5